



INTERNATIONAL
MATERIAL DATA
SYSTEM

 **Create Tips - Materials**



This series of presentations gives a recommended step-by-step procedure for creating MDSs in the IMDS system.

While this presentation gives recommendations on how to input data, it does not replace the individual OEM requirements that can be found on:

[Public pages > FAQ > OEM Specific Info](#)

Or specific product recommendations found after login on:

[Recommendation](#)

Note: these examples have been developed in the Model Office and represent demonstration data only.

About the Create Tips Series

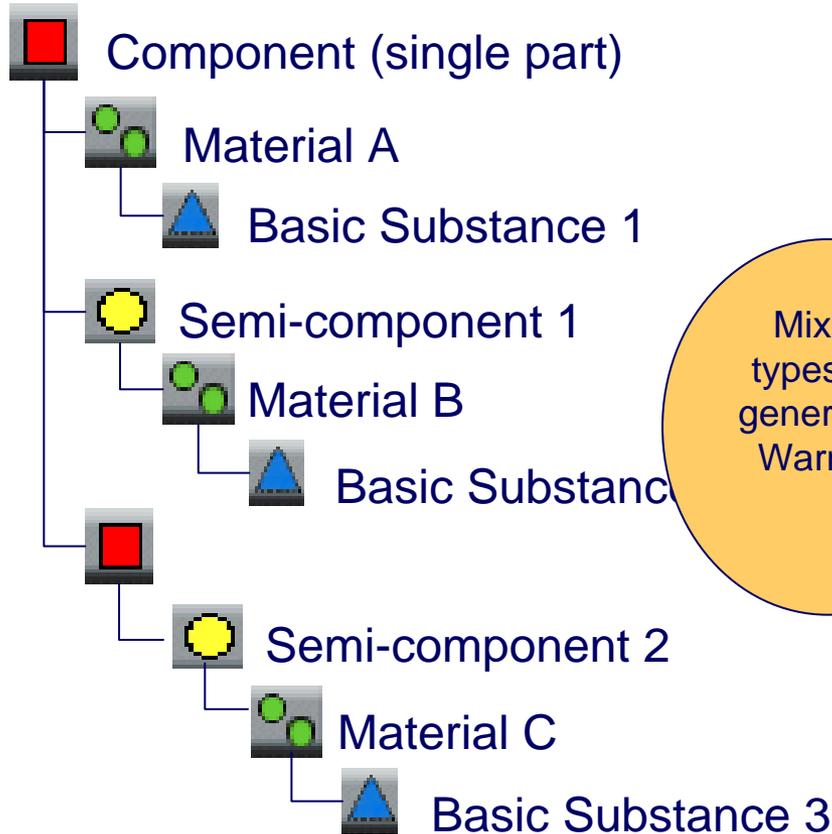
- Originally, the create tips gave information on materials, components, and semi-components. However, by popular demand, the one large document has been divided into smaller documents for ease of use. This is the largest document because the rules and requirements are more complex for materials than for components and semi-components.

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Basic MDS Structure



Note - The requirement is to reduce all parts to Basic Substances.

*At the moment, the system allows mixing of types at the same level - there are some OEM's and Tier One's that require all siblings be of the same type - be sure to understand your customer's requirements before expending a lot of effort – **please review Recommendation 001 and other recommendations that pertain to your product.***

Where To Find Recommendations

- The **Recommendation** link will bring up a screen similar to the following
- **IMDS 001** is what is commonly referred to as Recommendation 001
- You should check this screen once a month for changes

MATERIAL DATA SYSTEM - Microsoft Internet Explorer provided by EDS COE

Phipps, Kathy - EDS (RMC Troy) [9763]

MATERIAL DATA SYSTEM

[Recommendation](#)

Show latest versions

| Initial Date | Last Modi... | Number | Title | Download |
|--------------|--------------|----------|---|---|
| 08/11/2004 | 03/20/2007 | IMDS 006 | Automotive Lubricants 03/20/2007 - today | 006 [pdf] (English) |
| 02/19/2003 | 03/24/2004 | IMDS 007 | Steel Flat Products (strips and sheets), Metallic Coated (hot-dipped or electrolytically) 03/24/2004 - today | 007 [pdf] (English) |
| 02/19/2003 | 02/19/2003 | IMDS 008 | Electroplated (electrolytically deposition) fasteners 02/19/2003 - today | 008 [zip] (English) 008a [pdf] (English) 008b [pdf] (English) |
| 02/19/2003 | 02/19/2003 | IMDS 009 | Componente... electrolytically deposi... 02/19/2003 - today | 009 [zip] (English) 009a [pdf] (English) 009b [pdf] (English) |

Administration
Messages
Certification
Recommen - dation
Settings
Log off

When there is an "a" and a "b" part to the Recommendation, there is a file link in "a" that does not work. What it is supposed to link to is in file "b"

ublished on this
n PDF files.

Cancel

While you can create Components and Semi-Components (if used) within the ingredients tree, Materials must be created separately. It is strongly suggested that you get your materials into the system first. You have three choices for getting material information into IMDS:

- Use published materials (*use at own risk if not entered by manufacturer of materials or IMDS Committee - anyone can publish and there is no quality check*)
- Have your supplier input material MDS and send it to you (*best if you have time and a cooperative supplier*)
- Build the material tree yourself and internally release (*time consuming and you may not have information*)

Do You Have to Create a Material?

- The first question to ask is “**Do I have to create a Material?**”
 - If your material is published to a public norm or standard then most OEMs would prefer that you use an IMDS-Committee Published Material
- Do you manufacture the material?
 - If you do not manufacture the material then you should require your supplier to enter the data and either send or propose it to you. If you cannot get your supplier to enter the data – they must send you the breakdown of the product – ALL substances – **a MSDS sheet does NOT contain sufficient information to create a material.**
 - Reminder, ***if you create the material MDS then you are considered legally responsible for the validity of the data.*** We recommend that if you don't manufacture the material, then you don't create the MDS.
- Is the material already in IMDS – either created by my company, my supplier, or IMDS-Committee
 - The next section will give you some searching tips

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 **How to Search for a Material**



Material Search Tips

- Best to use IMDS ID
- Wild cards (*), partial names, etc. may also be useful (discussed later)
- You only have access to materials your company has created, data that has been published, and data that was sent to your company and accepted.
- The IMDS-Committee only publishes materials to a Public Norm and where that Norm has been defined by the basic substances that sum to 100%. (Some public norms give characteristics of the material but not the substances defined to 100%)

Filters – Ingredients Page Filters

Search

Component Semicompon... Material Basic Substa... All MDS/Modules

Name: Language: English German

Internal Mat.-No.: Development Sample Report:

ID-No.: Current versions

Search

- Name – the description given on the Ingredients page if your company created it or you are searching in Published data. The description from the Recipient Data page if it was sent/proposed to your company. **Note: if you cannot find the MDS, you may want to do a wild card search as there must be an EXACT match to display and leading spaces may be an issue. The search is not case sensitive.**
- Internal Mat.-No.. – the Internal Mat.-No from the Ingredients page if your company created it or you are searching in Published data. The information from the Recipient Data page if it was sent/proposed to your company. **Note: if you cannot find the MDS, you may want to do a wild card search as there must be an EXACT match to display and leading spaces may be an issue.**
- ID-No. – the IMDS ID number
- Language – whether you are searching for data in the English fields or German fields
- Version –
 - Current – the highest version number or all the versions in edit mode if your company created it. The highest version number that you have visibility to if another company created it – **warning – if your supplier uses the practice of creating a copy/new version every time they send to another company, you may not have visibility to the latest version of the MDS and will need to use All Versions.**
 - All Versions – All versions of the ID.
- Development Sample Report – If checked, will only return MDSs where the Development Sample Report box has been checked on the Ingredients page
- **Note: The BEST way to find anything in IMDS is by IMDS ID. You must also be looking in the right place -**
 - **Was it created by your company or another**
 - **If you cannot find with current versions, try All versions**
 - **Use Wild card searches – e.g. if looking for published SAE 1010 steel, use *1010 in the Name field**



Filters – Creation Dates

| | | | |
|-----------------|---|---|---|
| Date: | <input type="checkbox"/> published / accepted / internally rel... | or | <input type="checkbox"/> created (own MD... |
| (only for MDSs) | from: <input type="text" value="03/26/2007"/> | to: <input type="text" value="04/26/2007"/> | (MM/DD/YYYY) |

- 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.
- Created (own MDS) – this option will return only MDSs and modules created by your company, regardless of whether they have been released or not.
- Date - *this option will limit your results to MDSs released during the time frame (if first box checked) or created during the time frame (if 2nd box check). **Note: The dates must be given in the specified format. Only MDSs have the date tracked (as opposed to modules).***

Filters – Supplier MDSs

Supplier MDSs: accepted MDSs published MDSs

Supplier: all ILI [4844] IMDS-Committee / ILI Metals [5203] Stahl und Eisen Liste [1038]

save list

- You can limit your search to supplier data to data from a select list. By default, for materials, only IMDS-Committee materials will be returned.
 - Accepted MDSs – return only data that has been accepted by my company
 - Published MDSs – return only data that has been published
 - All – selecting this will search all suppliers – not just those on the list
 - Supplier List – restrict search returns to the suppliers listed. Material searches will automatically have the 3 IMDS-Committee companies 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
- **Note: when searching on Published materials, your supplier list will be supplemented by the IMDS-Committee materials. If you want these on the other tabs, you will have to customize your list.**
- **Additional note – the “save list” from the search screen is also attached to the Receive screen allowing a company to have users focused on certain suppliers. There is a 2nd “save list” available on the Sent screen.**
- **IF YOU DO NOT CHECK THE ALL BOX, ONLY THOSE DATASHEETS CREATED BY THE COMPANIES LISTED WILL BE RETURNED!!!!**



Filters – Supplier List – Add

The screenshot shows a web application interface for managing Supplier MDSs. On the left, there is a panel titled 'Supplier MDSs:' with two checked checkboxes: 'accepted MDSs' and 'published MDSs'. Below these, there is a 'Supplier:' dropdown menu with three options: 'IMDS-Committee [423]', 'IMDS-Committee / ILI Metals [18986]', and 'Stahl und Eisen Liste [313]'. There is also an 'all' checkbox. To the right, a search window titled 'Company - Microsoft Internet Explorer provided by EDS COE' is open. It has a breadcrumb trail: 'Administration -> Company -> Search'. Under 'Search Criteria:', there are radio buttons for 'Company' (selected) and 'Org.-Unit'. Below are input fields for 'Company Name:', 'Company-ID:', 'DUNS Number:', 'zip code:', 'City:', 'User Name:', and 'User ID:'. A tooltip for the DUNS Number field says 'Manufacturing DUNS in the format 99-999-9999'. At the bottom of the search window are 'Search' and 'Cancel' buttons.

- To add a supplier to the customized list, click on the 
- A search screen will appear where you can either search on a Company or an Org Unit
- After a search, you select your supplier and hit apply – in this case, I have added EDS (IMDS Boarding) to my list (note – the company numbers displayed are not from the production system).
- **Multiple suppliers may be selected to apply at one time if click individually on the desired companies or Org Units and then click on Apply.**

This screenshot shows the 'Supplier MDSs:' panel after a search. The 'accepted MDSs' and 'published MDSs' checkboxes are still checked. The 'Supplier:' dropdown menu now includes a new entry: 'EDS (IMDS Boarding) [7340]'. The other two entries remain. There is an 'all' checkbox. To the right of the dropdown are '+' and '-' buttons. At the bottom right of the panel is a 'save list' checkbox, which is checked.

Filters – Supplier List – Remove

Supplier MDSs: accepted MDSs published MDSs

Supplier: all

EDS (IMDS Boarding) [7340]
IMDS-Committee [423]
IMDS-Committee / ILI Metals [18986]

+ -

save list

- To remove a supplier from the customized list, first highlight the supplier to remove (EDS (IMDS Boarding) above) and then click on the 
- The results would be similar to below on the materials tab

Supplier MDSs: accepted MDSs published MDSs

Supplier: all

IMDS-Committee [423]
IMDS-Committee / ILI Metals [18986]
Stahl und Eisen Liste [313]

+ -

save list

Filters – Own MDSs/Modules

Own MDSs/Modules: own MDSs own Modules

Assigned Org.-Unit: (only for MDSs)

Assigned Contact: (only for MDSs)

last edited by me

- Own MDSs – the search results will only return MDSs and not modules
- Own Modules – the search results will only return modules and not MDSs
- Assigned Org.-Unit – the search result will be limited to MDSs assigned to a particular Organizational Unit
- Assigned Contact – the search result will be limited to MDSs with the contact person as selected
- Last edited by me – the search result will be limited to those MDSs or Modules last edited by the user ID currently logged in
- **Note – The Contacts are from a pull-down list modified by the client manager under Administration > Contact Person**

Filters – Own MDSs/Modules

Own MDSs/Modules: own MDSs own Modules

Assigned Org.-Unit: (only for MDSs)

Assigned Contact: (only for MDSs)

last edited by me

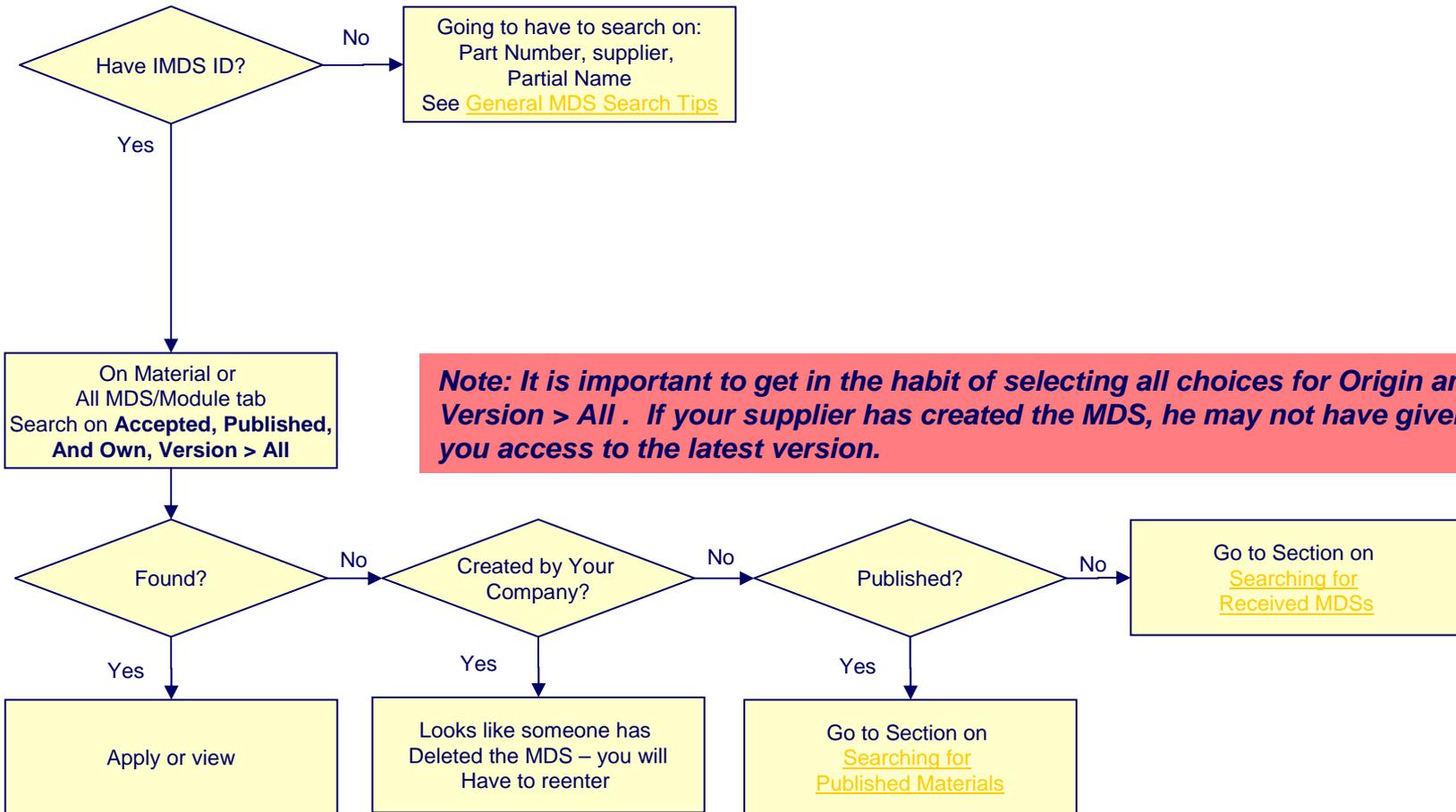
- Own MDSs – the search results will only return MDSs and not modules
- Own Modules – the search results will only return modules and not MDSs
- Assigned Org.-Unit – the search result will be limited to MDSs assigned to a particular Organizational Unit
- Assigned Contact – the search result will be limited to MDSs with the contact person as selected
- Last edited by me – the search result will be limited to those MDSs or Modules last edited by the user ID currently logged in
- **Note – The Contacts are from a pull-down list modified by the client manager under Administration > Contact Person**

Filters – Material Specific

| | | | |
|----------------|----------------------|-----------------|--|
| Trade name: | <input type="text"/> | Norm/Standard: | <input data-bbox="1412 287 1489 322" type="button" value="+"/> |
| Std. Mat.-No.: | <input type="text"/> | Classification: | <input data-bbox="1412 334 1489 369" type="button" value="+"/> |
| Symbol | <input type="text"/> | | |

- Trade name – if given, the trade name of the material (e.g. Teflon)
- Std. Mat.-No. – Standard material number - only available on selected material classifications.
- Symbol – Material symbol – only available on selected material classifications.
- Norm/Standard – the given Norm/Standard
- Classification – the material classification

Searching for Materials



Note: It is important to get in the habit of selecting all choices for Origin and Version > All . If your supplier has created the MDS, he may not have given you access to the latest version.



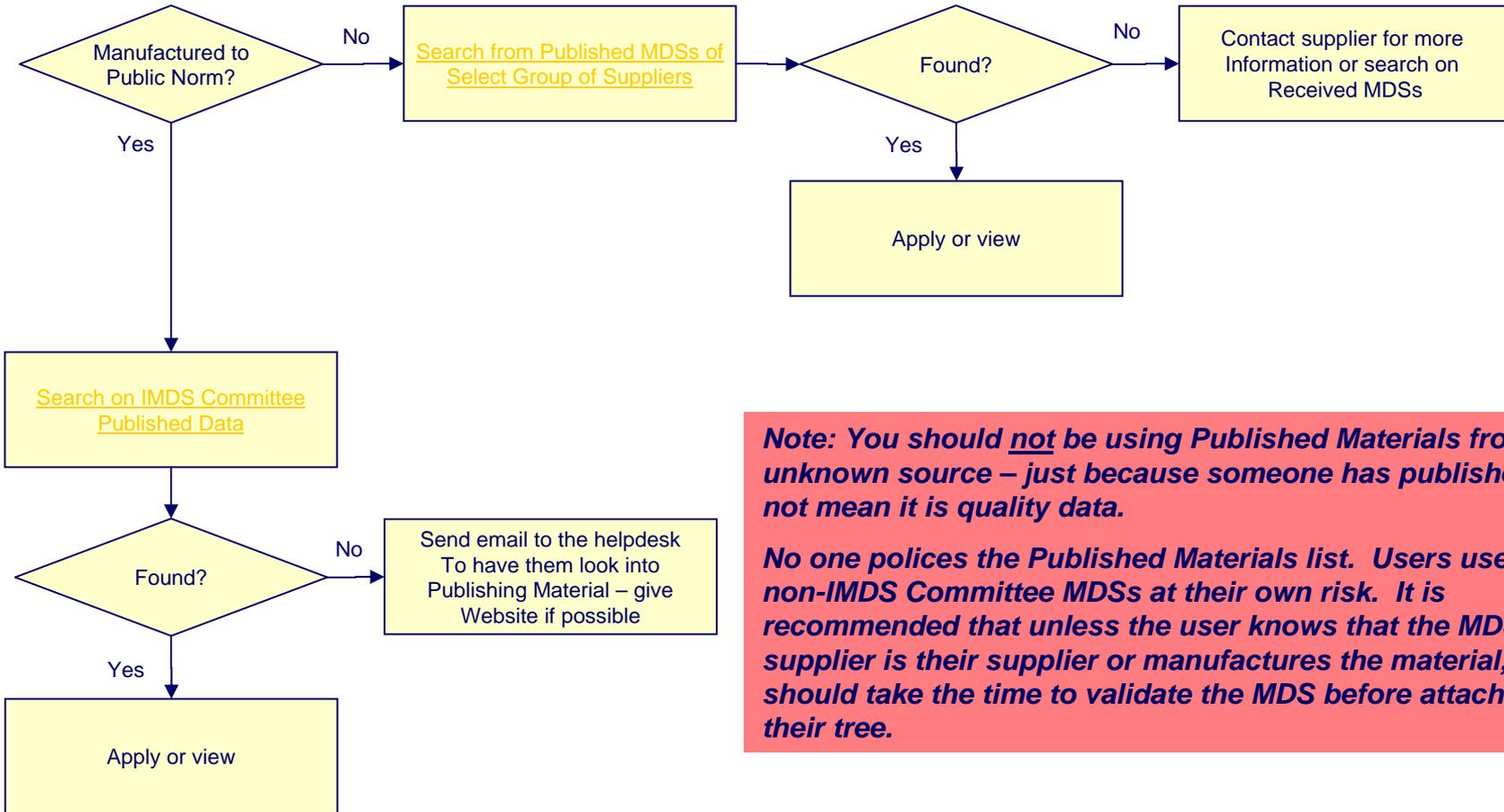
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 **Searching for Published Materials**





Searching for Published Materials (ID Not Known)



Note: You should not be using Published Materials from an unknown source – just because someone has published does not mean it is quality data.

No one polices the Published Materials list. Users use the non-IMDS Committee MDSs at their own risk. It is recommended that unless the user knows that the MDS supplier is their supplier or manufactures the material, they should take the time to validate the MDS before attaching it to their tree.



Searching for IMDS Committee Published Materials

- The IMDS Steering Committee has published MDSs that comply with a material standard and many companies prefer that you use this data instead of creating your own. If you want a material standard published, send to the helpdesk and we will try to add. Not all standards contain a complete list of substances. We can only publish if the standard includes substances that sum to 100%. These have been added to your saved company list when searching for materials. A list of Public Norms can be found Public Pages > FAQ > General Info > ***What do the Norms/Standards acronyms mean?***
- Guide to the IMDS Steering Committee Published Materials:
 - Stahl und Eisen Liste (313) - predominantly steels and steel alloys – no norm/standard on most of them but contain a material number of form 1.nnnn where nnnn is a 4 digit number.
 - IMDS-Committee (423) – coatings and alloys and also some semi-components
 - IMDS-Committee / ILI Metals (18986) – steels published to other standards not in the Stahl und Eisen Liste.
- The IMDS Committee metal materials have usually been entered with either the UNS number or the JIS number as the standard material number. It is suggested that you perform a wildcard search on the standard material number (i.e. *10211 in the Std. Mat. No field as it may have been entered as G10211 or G 10211).
- The IMDS Committee materials in material classifications 1-5, with very few exceptions, have been entered with the public norm. It is suggested that you perform a wildcard search on the norm (i.e. select norm ASTM and *32 as it may have been entered as B32 or B 32)
- Since IMDS Committee materials are undergoing cleanup of duplicate data, it is suggested that you get in the habit of performing a search each time on the norm or standard material number instead of relying on an MDS ID.



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 **Create a Material**



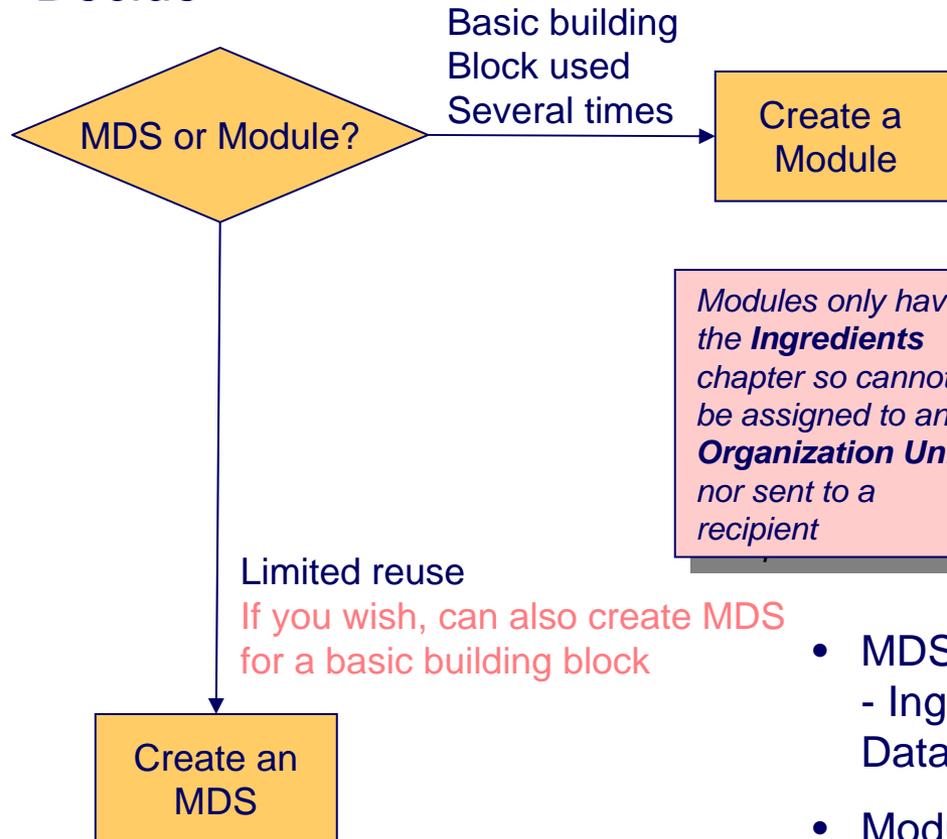
Before You Begin – Must Have Data

- The following information will be required for you to complete data entry:
 - Know a **minimum** of 90% of the substances in the material
 - Material Classification
 - Applicable Public Norms/Standards
 - Applicable OEM In-House Norms
 - Applicable Material Symbols
 - Any special customer requirements
 - Recommendation 001 and any other Recommendation pertaining to the product
- **An MSDS sheet does not contain sufficient information to enter the material.**
- **Materials are best entered by someone with a chemical or materials background.**
- **Report only materials in their final state – with the exception of classification 9.x and hides (7.1), the final state usually does not include gases or liquids. If you include liquids or gases in anything apart from 9.X or 7.1, be prepared to defend your submission.**
- **It is extremely rare (although not unheard of) to have a material composed of only one substance. If you use such a construct in your submission, be prepared to defend it.**

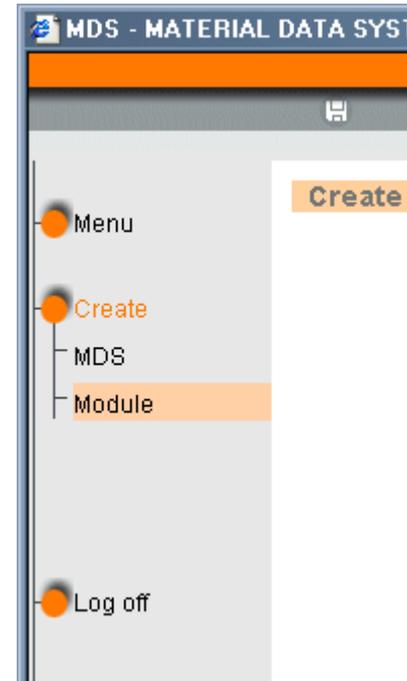


MDS or Module?

- Decide



*Modules only have the **Ingredients** chapter so cannot be assigned to an **Organization Unit** nor sent to a recipient*



- MDSs require all 3 chapters 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 – cannot send to customer or get assigned to an Org Unit.

Create the Material

Please make your selection:



Select
Material

- Most materials follow the same path in creation – there are additional requirements for the following “Special Material” types:
 - Filled Thermoplastics
 - Unfilled Thermoplastics
 - Thermoplastic Elastomers
 - Elastomers / elastomeric compounds



Create a Material – Not “Special Material”

- At this point, we are assuming that you have already checked to see if the material exists and it doesn't
- Select a material classification (you only can select underlined classifications)
- *5.1.a, 5.1.b, 5.2 and 5.3 have a wizard so we'll do those later*
- Once the selection is made, click **Next**

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Creation of a new material

Selection of the material classification

Maybe this material already exists in IMDS. If you are unsure about that, here you can jump to the material search.

First of all, please select the material classification:

| Classification | Description |
|----------------|--|
| 2.2 | <u>Magnesium and magnesium alloys</u> |
| 2.2.1 | <u>Cast magnesium alloys</u> |
| 2.2.2 | <u>Wrought magnesium alloys</u> |
| 2.3 | <u>Titanium and titanium alloys</u> |
| 3 | Heavy metals, cast and wrought alloys |
| 3.1 | <u>Copper (e.g. copper amounts in cable harnesses)</u> |
| 3.2 | <u>Copper alloys</u> |
| 3.3 | <u>Zinc alloys</u> |
| 3.4 | <u>Nickel alloys</u> |
| 3.5 | <u>Lead</u> |
| 4 | Special metals |
| 4.1 | <u>Platinum / rhodium</u> |
| 4.2 | <u>Other special metals</u> |
| 5 | Polymer materials |
| 5.1 | Thermoplastics |
| 5.1.a | <u>filled Thermoplastics</u> |
| 5.1.b | <u>unfilled Thermoplastics</u> |
| 5.2 | <u>Thermoplastic elastomers</u> |

This is a material is for illustrative purposes only – do not copy.



Specifics on Material Checks – substances

| Classification number: | Classification name: | Must contain: |
|------------------------|--|---|
| 1 | Steel and iron materials | |
| 1.1 | Steels / cast steel / sintered steel | Fe ≥ 50% |
| 1.1.1 | unalloyed, low alloyed | Fe ≥ 65% |
| 1.1.2 | highly alloyed | Fe ≥ 30% |
| 1.2 | Cast iron | Fe ≥ 50% |
| 1.2.1 | Cast iron with lamellar graphite / tempered cast iron | Fe ≥ 70% |
| 1.2.2 | Cast iron with nodular graphite / vermicular cast iron | Fe ≥ 55% |
| 1.2.3 | Highly alloyed cast iron | Fe ≥ 14% |
| 2.1 | Aluminum and aluminum alloys | Al ≥ 50% |
| 2.1.1 | Cast aluminum alloys | Al ≥ 50% |
| 2.1.2 | Wrought aluminum alloys | Al ≥ 50% |
| 2.2 | Magnesium and magnesium alloys | Sum of Mg and Magnesium powder (stabilized) ≥ 50% |
| 2.2.1 | Cast magnesium alloys | Sum of Mg and Magnesium powder (stabilized) ≥ 50% |
| 2.2.2 | Wrought magnesium alloys | Sum of Mg and Magnesium powder (stabilized) ≥ 50% |
| 2.3 | Titanium and titanium alloys | Ti ≥ 50% |
| 3 | Heavy metals, cast and wrought alloys | |
| 3.1 | Copper (e.g. copper amounts in cable harnesses) | Cu ≥ 93% |
| 3.2 | Copper alloys | Cu ≥ 48% |
| 3.3 | Zinc alloys | Sum of Zinc substances ≥ 70% |
| 3.4 | Nickel alloys | Ni ≥ 50% |
| 3.5 | Lead | Pb ≥ 50% |
| 4 | Special metals | |
| 4.1 | Platinum / rhodium | Sum of Platinum and Rhodium ≥ 50% |
| 4.2 | Other special metals | Other special metals or their sum ≥ 50 % |



Specifics on Material Checks – Polymers & Lacquers

| Classification Number | Classification Name | Must Contain | Must not Contain |
|-----------------------|---|---|--|
| 5 | Polymer materials | | |
| 5.1 | Thermoplastics | | |
| 5.1.a | filled Thermoplastics | Sum of substances containing ...poly... in their names excluding sum of Basic Duromers $\geq 23\%$ | - |
| 5.1.b | unfilled Thermoplastics | Sum of substances containing ...poly...in their names excluding sum of Basic Duromers $\geq 25\%$ | - |
| 5.2 | Thermoplastic elastomers | Sum of substances containing ...poly...in their names excluding sum of Basic Duromers $\geq 25\%$ | - |
| 5.3 | Elastomers / elastomeric compounds | Sum of Basic Rubbers or substances containing ...poly... in their names excluding Basic Polymers and Basic Duromers and $\geq 10\%$ | - |
| 5.4 | Duromers | Sum of substances containing ...poly... in their names excluding sum of Basic Polymers $\geq 15\%$ | - |
| 5.4.1 | Polyurethane | Sum of substances containing ...poly... in their names $\geq 25\%$ | - |
| 5.4.2 | Unsaturated polyester | Sum of substances containing ...poly... in their names excluding sum of Basic Polymers $\geq 15\%$ | - |
| 5.4.3 | Other duromers | Sum of substances containing ...poly... in their names excluding sum of Basic Polymers $\geq 15\%$ | - |
| 5.5 | Polymeric compounds (e.g. inseparable laminated trim parts) | | |
| 5.5.1 | Plastics (in polymeric compounds) | Sum of substances containing ...poly... in their names $\geq 25\%$ | - |
| 5.5.2 | Textiles (in polymeric compounds) | - | Sum of Substances in classes 1-4 $\geq 50\%$ |
| 6 | Process polymers | | |
| 6.1 | Lacquers | Sum of Basic Duromer or ...poly... $\geq 25\%$ | - |

Specifics on Material Checks – Other Classifications

| Classification Number | Classification Name | Must not Contain |
|-----------------------|--|---|
| 6 | Process polymers | |
| 6.2 | Adhesives, sealants | Sum of substances fitting classifications 1-4 \geq 90 % |
| 6.3 | Underseal | Sum of substances fitting classifications 1-4 \geq 50 % |
| 7 | Other materials and material compounds (scope of mixture) | |
| 7.1 | Modified organic natural materials (e.g. leather, wood, cardboard, c...) | Sum of substances fitting classifications 1-6 \geq 50 % |
| 7.2 | Ceramics / glass | Sum of substances fitting classifications 1-4 \geq 80 % |
| 9 | Fuels and auxiliary means | |
| 9.1 | Fuels | Sum of substances fitting classifications 1-6 \geq 50 % |
| 9.2 | Lubricants | Sum of substances fitting classifications 1-4 \geq 50 % |
| 9.3 | Brake fluid | Sum of substances fitting classifications 1-4 \geq 50 % |
| 9.4 | Coolant / other glycols | Sum of substances fitting classifications 1-4 \geq 50 % |
| 9.5 | Refrigerant | Sum of substances fitting classifications 1-6 \geq 50 % |
| 9.6 | Washing water, battery acids | Sum of substances fitting classifications 1-6 \geq 50 % |
| 9.7 | Preservative | Sum of substances fitting classifications 1-4 \geq 50 % |
| 9.8 | Other fuels and auxiliary means | Sum of substances fitting classifications 1-4 \geq 50 % |

Supply Identification

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Ingredients
Material_900000420 900000420 / 0.01 (Node ID 900000420)

Create MDS Ingredients

Material_900000420

Details

| | |
|---------------------------|-----------------------------|
| Type | Material (MDS) |
| ID / Version | 900000420 / 0.01 |
| MDS Supplier | EDS (RMC Troy) |
| Name | / toxic demo material (EN) |
| Trade name | (EN) |
| Internal Mat.-No. | |
| Std. Mat.-No. | |
| Symbol | |
| Classification | Other special metals Search |
| Norms/Standards | |
| Inhouse Norms | |
| Supplier | |
| Remark | (EN) |
| Development Sample Report | <input type="checkbox"/> |

- Select from the following to see a discussion
 - Name
 - Trade name
 - Internal Mat.-No.
 - Std. Mat.-No.
 - Norms/Standards
 - Inhouse Norms

You CANNOT take the default name - this is the 586793 MDS that's been created - not useful for finding later

Classification selection is carried over, but you can change with **Search** button

Caution About Names/Trade Names

- Materials are multi-lingual. Normally, you will fill in the English and hit save, IMDS will note that the German (DE) is blank and copy the English into the German.
- If you change the Name or Trade Name after the save, the English **WILL NOT** be copied to the German. When you do your search, you will have 2 different items in the results.
- Solution - when you change the Name or Trade name, use the pulldown to DE and delete whatever is there, then save and the English will be copied to the German.

| | | |
|------------|---|--------|
| Name | <input type="text" value="Material 77462"/> | (EN) ▾ |
| Trade name | <input type="text"/> | (EN) ▾ |

| | | |
|------------|----------------------|--------|
| Name | <input type="text"/> | (DE) ▾ |
| Trade name | <input type="text"/> | (DE) ▾ |

Users frequently accidentally delete a material because both the English and German are displayed in a search. IF IT IS THE SAME ID/VERSION IT IS THE SAME MDS!!

- The material name must always define the material and not be a trade name.
- If applicable, material names need to reflect the existing standards
 - For metallic materials:
 - steel – Steel / Iron List, EN 10027, JIS norms, e.g. STM-C 540
 - aluminium alloys – EN 573, JIS norms, e.g. Al-Si12
 - copper alloys – ISO norms, e.g. CuAl5
 - etc.
 - For plastics – ISO 1043-1 to 4 (see IMDS 010), e.G. Pe-ld
 - For elastomers – ISO 1629 (see IMDS 003), e.G. Acn
 - For thermoplastic elastomers – ISO 18064 (see IMDS 013), e.G. Tpa-es
- If no standard is applicable, the name must be descriptive such as:
 - adhesive layer (for adhesives)
 - fatting agent (e.g. for leather)
 - finish (e.g. for textiles)
 - lamination material (e.g. laminate for textiles)
 - primer, basecoat, clearcoat (for paints)
- The name must be entered in English in the EN field. The name in other language optional.



- Product trade name. For standard products which are defined in public norms (e.g. most metallic materials), this entry is not mandatory. In drawings these trade names sometimes are pre-defined. Then the entry is mandatory. For materials which are not defined in public norms (e.g. plastic materials, oils, fats, flake layers, glue etc.) this entry is not mandatory but useful in order to uniquely identify the product.

- The number or code that you refer to the material as. This is for YOUR use and your customer should not have any requirement on how you use this field. This entry is not mandatory. This is NOT the same as the standard material number.

- Standard Material Number – **not all materials have a standard material number** and the field is available only for the metallic classifications. Not all metals are manufactured to a standard. Unfortunately, there is no one right answer to the number that should be placed here as different regions have different numbering systems. However, one of the following two is preferred (although a case may be made for VDeH, EN or DIN)
 - UNS (Unified Numbering System - Metals and Alloys) and most of the IMDS Committee materials were entered with this number
 - Japanese standard is the JIS

Norms and Standards

- Norms and standards refer to public norms in which material compositions are defined (e.g. EN, DIN, JIS, ASTM, ISO etc.).
- For materials described in these norms an entry is mandatory. **Not all materials are manufactured to a Public Norm**
- Now to Norms, if there are any, click on +
- Only OEMs have Inhouse Norms - some suppliers manufactured to an OEM norm.

The screenshot shows the MDS - MATERIAL DATA SYSTEM interface. The main content area is titled 'Ingredients' and displays 'Material_900000420 900000420 / 0.01 (Node ID 900000420)'. A 'Details' section is visible on the right, containing fields for Type, ID / Version, MDS Supplier, Name, Trade name, Internal Mat.-No., Std. Mat.-No., Symbol, Classification, Norms/Standards, Inhouse Norms, Supplier, Remark, and Development Sample Report. A yellow callout box labeled 'Find Norms' points to the '+' button in the Norms/Standards field.

Note: NOT ALL MATERIALS ARE MANUFACTURED TO A NORM. IF MANUFACTURED TO A NORM, YOU MUST INCLUDE IT. IF THERE IS NO NORM, YOU CANNOT INCLUDE IT.

••• Add Norms

- Depending on what you select on the left window, the right window will change
- Select from the right window and enter the code
- Click on **Apply**
- Inhouse norms are added the same way but appear in the lower box

select norm - Microsoft Internet Explorer provided by EDS COE

MDS
Material_509692 509692 / 0.01

Material select norm

public norms

- BMW
- DaimlerChrysler AG
- Ford Motor Company
- Adam Opel AG
- Volkswagen AG
- Toyota Motor Corporation
- SUZUKI MOTOR CORPO
- sup12
- car1

PREN

QQ

SAE

SAE AMS

SE

SEW

SIS

SS

SS EN

SS EN ISO

Code: 1010

Apply Back

About in house Norms – they are only visible to the MDS creating company and the OEM whose norm they are. Everyone else in the supply chain will not see them. Suppliers who copy instead of reference the MDS sent to them will not know that a material has been made to an OEM norm.

Inhouse Norms

- Inhouse norms can only be seen by users in the creating IMDS company and the OEM who's norm it is (specific to IMDS company ID).
- In this example, Adam Opel GmbH uses inhouse norms, but that inhouse norm would only be visible to users in company 104 and not visible if the same material were used on a part sent to other General Motors companies or any supplier.

norm frame - Microsoft Internet Explorer provided by EDS COE

MDS
Copy_Carpet Backing_25280... 70308660 / 0.01 → Material → select norm

| | |
|----------------------------|-----|
| Ssangyong Motor Compa | EMK |
| Daimler AG | GM |
| SUZUKI MOTOR CORPO | GME |
| Adam Opel GmbH | GMI |
| Mazda Motor Corporation | GMW |
| GM Daewoo Auto & Tech | HN |
| Fuji Heavy Industries, Ltd | ISA |
| HYUNDAI MOTOR COMP | ISC |
| Daihatsu Motor Co., Ltd. | ISD |
| Volkswagen AG | ISK |

Code:

Apply Back

Material Supplier

- This is a totally fictional material, but we'll pretend it is to a public norm.
- Enter your supplier information if required or desired
- Click on **Save**

MDS - MATERIAL DATA SYSTEM - Microsoft Internet Explorer provided by EDS COE

Phipps, Kathy - EDS (RMC Troy) [9763]

MATERIAL DATA SYSTEM

Menu

Create

MDS

Ingredients

Recycle information

Supplier data

Recipient data

Log off

Ingredients

Highly toxic demo m... 900000420 / 0.01 (Node ID 900000420)

Create MDS Ingredients

GADSL

Highly toxic demo material

Details

Applied norm

Name: Highly toxic demo ma (EN)

Trade: (EN)

Internal ID:

Std. Mat.:

Symbol:

Classification: Other special metals Search

Norms/Standards: SAE 1010

Inhouse Norms:

Supplier:

Remark: (EN)

Development Sample Report

Tree search

Save Next

If required, enter the material supplier name - this probably is not the same as the supplier of the MDS (in this case your company)

Many suppliers don't want to state who their suppliers are. Check with your customer to see if this is a requirement.



Remark

- The Norm has been applied - repeat if there are any more
- Enter any pertinent remarks
- Click on **Save**

. 'Save' and 'Next' buttons are at the bottom right."/>

Ingredients
Highly toxic demo m... 900000420 / 0.01 (Node ID 900000420)

Details

| | |
|-------------------|-----------------------------|
| Type | Material (MDS) |
| ID / Version | 900000420 / 0.01 |
| MDS Supplier | EDS (RMC Troy) |
| Name | Highly toxic demo ma (EN) |
| Trade name | (EN) |
| Internal Mat.-No. | |
| Std. Mat.-No. | |
| Symbol | |
| Classification | Other special metals Search |
| Norms/Standards | SAE 1010 |
| Inhouse Norms | |
| Report | <input type="checkbox"/> |

Save Next

If required, enter any remarks - the English is not copied to the German here – when copying/pasting from an MSOffice product you may have problems as the hidden formatting characters interfere with saving your remarks. If you must copy/paste, use Notepad or Wordpad. Good uses for this field are weight information – e.g. 1 gram/cc or 2 grams per cm.

Development Sample Report

- This box is to be checked if the material you are reporting is pre-production.
- Click on **Save**

MDS - MATERIAL DATA SYSTEM - Microsoft Internet Explorer provided by EDS COE

Ingredients
Test Material 509692 / 0.01 (Node ID 509692)

Menu
Create
MDS
Ingredients
Recycle information
Supplier data
Recipient data
Log off

ILRS

Test Material

Type: Material (MDS)
ID / Version: 509692 / 0.01
MDS Supplier: KPTest
Name: Test Material (EN)
Trade name: (EN)
Material-No.:
Symbol:
Classification: highly alloyed Search
Norms/Standards: SAE 1010 + -
Inhouse Norms:
Supplier:
Remark: (EN)
Development Sample Report

Development Sample Report Check box

Warning: If you check this box, you are stating that the material composition is not finalized and the system will not generate a warning if you have > 10% undeclared. However, If you use this material on a component that is for production, you will get a warning because you cannot have a "finalized" part without knowing for certain what the composition is. Your customer will probably reject the submission.

Construct Tree

- You can add Materials or Basic Substance - in this case, click on the



Add Material:

- Your defined materials
- Materials that have been published
- Materials that have been sent to and accepted by your company

Add Basic Substance

- Substances that have a CAS (Chemical Abstracts Service Number), a **Pseudo Substance** or joker/wildcard

INTERNATIONAL
MATERIAL DATA
SYSTEM

 **Basic Substances**



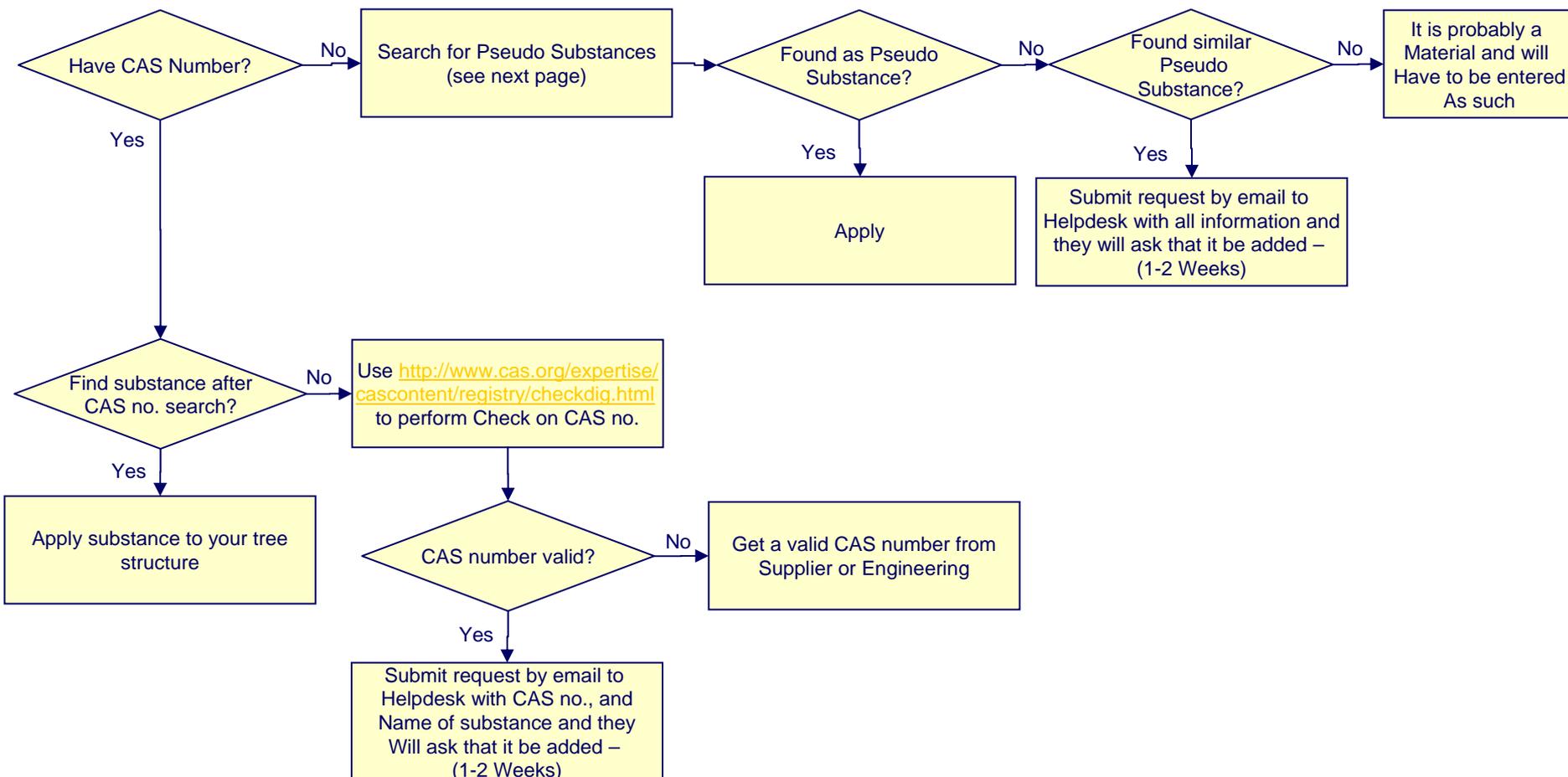
••• About Basic Substances

- **ONLY SUBSTANCES EXPECTED TO BE FOUND ON THE VEHICLE AT IT'S END OF LIFE ARE TO INCLUDED IN THE INGREDIENTS.** The same philosophy guides the GADSL list (Global Automotive Declarable Substance List – www.gadsl.org) You will not find processing chemicals on the GADSL although some of them may be harmful.
- Neither IMDS nor the GADSL is an exhaustive list – with 100,000s of chemicals, it is impossible to list every CAS number. If a CAS number doesn't appear on the GADSL does not mean it is not declarable/prohibited as the GADSL really is the category list and the reference list is just that – a reference. the GADSL is only updated once a year. IMDS can be updated based on a user request to the helpdesk.
- Before asking the helpdesk to add a CAS number, please run it through the CAS number check (at least 50% of the requests the helpdesks get have an incorrect CAS number) - <http://www.cas.org/expertise/cascontent/registry/checkdig.html>
- Not every substance with a CAS number is considered a basic substance in IMDS terms. There are alloys or “groups” that have been assigned a CAS number.
- Because the IMDS substance list is a **validated** list that has been developed over the years at a cost, it is NOT available for download and Use Conditions prohibit the use of the list in 3rd party software except where an agreement exists between the vendor and IMDS.

Basic Substance Search Tips

- Best to use CAS number - if it isn't in the system, send an email to the helpdesk and ask that it be added
 - When the substance is added or the request is rejected, the helpdesk will notify the user
- This is a European system and there are European spellings - aluminium vs aluminum, sulphur vs sulfur, etc.
- Wild cards (*), partial names, etc. may also be useful
 - *resin will return all resins
 - Silicone will return all substances starting with silicone
 - *fibre will return Pseudo-substances that are usually used as fillers or natural occurring substances
 - Basic duromer, basic elastomer, basic oil, Thermoplastic elastomer and basic rubber will return pseudo-substances in those categories
- A **Pseudo-Substance** gives an accurate description of the substance or the substance group but does not have a CAS-No. It is important to point out that these substances are accepted as real substances in IMDS and are not considered as wildcards. They are therefore allowed to be used within the 90% disclosure rule according to the IMDS Recommendation 001. If the substance exists as a Pseudo-substance in IMDS, it will not be added as a substance with a CAS number.

Searching for Basic Substance



Note – not all substances with CAS numbers will be added – those already in the system as Pseudo Substances and those that represent alloys or groups will not be added.





How to Search for Pseudo Substances

- A Pseudo Substance has a – in the CAS number field. Pseudo substances can be used up to 100% of a material – however, it is doubtful that any material would be made of 100% of any substance or else you would be supplying a basic substance and if that is the case, you should not have to enter into IMDS.
- Since search results are limited to 500 returns, it is not possible to look at a complete list of Pseudo Substances in the system. You will need to enter some information in the name field to find the type of Pseudo Substance you are looking for – for example:
 - Basic Duromer – many of these are resins
 - Basic Oil – limited list of oils – because many oils are PAHs, you will usually have to search by CAS number
 - Basic Polymer – many are ISO 1043 substances – you could also search on polymer name (e.g. *PA6, *EMAK, *FEP, etc.)
 - Basic Rubber – again you could either look through the entire list or enter the name in the field – a wildcard search works best (e.g. *ABR, *XCR, etc.)
 - Plasticizer – best to do a wildcard search – e.g. enter *plasticizer in the name field
 - Flame Retardant – several undeclarable/non-prohibited can be found by entering *1043-4 in the name field
 - Man-made fibers – can be found by entering Man-made in the name field
 - Natural fibers such as wool and hair – can be found by entering Natural in the name field
 - Thermoplastic Elastomers – can be found by entering Thermoplastic in the name field or by more specific searches on the name (e.g. *TPC, *TPV, etc.)
 - Soaps and other Thickeners – can be found by entering Thickener in the name field
 - Some other fillers can be found by entering the ISO 1043-2 description (e.g. MD for Mineral Powder). You might also try entering *1043-2 in the name field to find the fillers used in Thermoplastics.
 - Resins are frequently found by entering *resin in the name field
- The above does not contain an exhaustive list, but guidelines on how to structure your search for pseudo substances.

Jokers/Wildcards

- You may use jokers/wildcards in your structure if BOTH of the following conditions are true:
 - The substance being replaced is not declarable or prohibited
 - The TOTAL of all undeclared substances (substances marked confidential or joker/wildcard) is a MAXIMUM of 10% - except where exemption is given in a Recommendation
- Jokers/Wildcards have the CAS number **system** and there are only 9 of them in IMDS:

MDS, Module and Substance search - extended - Microsoft Internet Explorer provided by EDS ...

MDS and Module Search Search

Search Criteria: CAS No.=system
9 items found. Ordered ascending by "Name"

| No. | Name | CAS No. | EU-Index | Einecs-No. | Synonym | GAD... |
|-----|----------------------------------|---------|----------|------------|--------------------|--------|
| 1 | Flame Retardant, not to de... | system | system | system | - | - |
| 2 | Further Additives, not to de... | system | system | system | Additives, not... | - |
| 3 | Impact modifier, not to decl... | system | system | system | - | - |
| 4 | Inorganic Ingredient, not to... | system | system | system | Mineral Mater... | - |
| 5 | Misc., not to declare | system | system | system | Miscellaneous | - |
| 6 | not yet specified, not to dec... | system | system | system | - | - |
| 7 | Organic Ingredient, not to d... | system | system | system | Natural Ingre... | - |
| 8 | Pigment portion, not to decl... | system | system | system | colorant, not t... | - |
| 9 | Plasticizer, not to declare | system | system | system | - | - |

Apply View Clipboard New Search Cancel

Find First Substance

- Enter the entire compound, or a shortened version of it, or the CAS number and click on **Search**

*Search hint:
Sometimes less is more - the more filters you fill in, the more it has to match and the search may come back unsuccessful.*

MDS, Module and Substance search - extended - Microsoft Internet Explorer provided by EDS ...

MDS and Module Search

Search

Component Semicompon... Material Basic Substa... All MDS/Modules

Name / Synonym:

CAS No.:

EU-Index:

Einecs-No.:

Group:

GADSL category duty-to-declare: Yes No N.A.

GADSL category prohibited: Yes No N.A.

REACH-SVHC: Yes No N.A.

Search Cancel

This material will primarily consist of substances that are declarable, prohibited, REACH SVHC, or require an application code to illustrate functions of IMDS – this is not a real material.

Add First Substance

- Scroll down the list until you find the Basic Substance and click **Apply**

Basic substance addition - If you don't find your substance and have the CAS number, email the help desk with all the relevant information to have it added.

MDS, Module and Substance search - extended - Microsoft Internet Explorer provided by EDS ...

MDS and Module Search

Search Criteria: Name=nickel

54 items found. Ordered ascending by "Name"

| No. | Name | CAS No. | EU-Index | Einecs-No. | Synonym | GAD... |
|-----|----------------------------------|------------|--------------|------------|--------------------|--------|
| 1 | 2,4-Pentanedione, nickel(II)... | 3264-82-2 | - | 221-875-7 | Nickel, bis(2,... | D |
| 2 | 2,4-Pentanedione, nickel(II)... | 3264-82-2 | - | 221-875-7 | Nickelous ace... | D |
| 3 | Antimony nickel titanium oxi... | 8007-18-9 | - | 232-353-3 | Nickel-Titaniu... | D |
| 4 | Bis(diethyldithiocarbamato... | 14267-17-5 | - | 238-157-4 | Nickel, bis(die... | D |
| 5 | Bis(diisobutyldithiocarbamat... | 15317-78-9 | - | 239-354-8 | Nickel diisobu... | D |
| 6 | Bis(eta5-2,4-cyclopentadie... | 1271-28-9 | - | 215-039-0 | Nickel, compo... | D |
| 7 | Bis(eta5-2,4-cyclopentadie... | 1271-28-9 | - | 215-039-0 | Nickelocene | D |
| 8 | Bis[2,3-bis(hydroxyimino)-N... | 29204-84-0 | - | 249-503-9 | Nickel, bis[2,3... | D |
| 9 | Dinickel-trioxide | 1314-06-3 | 028-005-00-3 | 215-217-8 | Nickel (III) oxide | D |
| 10 | Dinickel-trioxide | 1314-06-3 | 028-005-00-3 | 215-217-8 | Nickel sesqui... | D |
| 11 | Iron nickel zinc oxide | 12645-50-0 | - | - | Nickel zinc fer... | D |
| 12 | Iron nickel zinc oxide | 12645-50-0 | - | - | Nickel zinc fer... | D |
| 13 | Nickel | 7440-02-0 | 028-002-00-7 | 231-111-4 | Ni | D |
| 14 | Nickel acetate tetrahydrate | 6018-89-9 | - | - | Acetic acid, ni... | D |
| 15 | Nickel bis(dibutyldithiocarba... | 13927-77-0 | - | 237-696-2 | - | D |
| 16 | Nickel bis(dihydrogen phos... | 18718-11-1 | - | 242-522-3 | - | D |
| 17 | Nickel bis(dimethyldithiocar... | 15521-65-0 | - | 239-560-8 | Nickel dimeth... | D |
| 18 | Nickel bis(dimethyldithiocar... | 15521-65-0 | - | 239-560-8 | Nickel, bis(di... | D |
| 19 | Nickel bis(sulphamidate) | 13770-89-3 | - | 237-396-1 | Nickel sulfam... | D |
| 20 | Nickel cyanide | 557-19-7 | - | 209-160-8 | Nickel dicyani... | D |
| 21 | Nickel di(acetate) | 373-02-4 | - | 206-761-7 | Acetic acid, ni... | D |
| 22 | Nickel di(acetate) | 373-02-4 | - | 206-761-7 | Nickel(II) acet... | D |
| 23 | Nickel hydroxide | 11113-74-9 | - | 234-348-1 | - | D |

Apply View Clipboard New Search Cancel

Fill in First Substance %

- Now you need to add the **Portion** (in this case 5-10%).

*If you go outside the Recommendation 001 ranges, you will get a **Warning: Range of portion may not exceed allowed percentage.** This is a warning and not an error and IMDS will allow you to send. However your customer may choose not to accept.*

- Notice you can't go down the tree any further from a Basic Substance
- Click on the top of the tree (Test material) to add another substance.

The screenshot shows the MDS - MATERIAL DATA SYSTEM web interface. The main content area displays the 'Ingredients' section for a 'Highly toxic demo material' (Node ID 900000420). The 'Details' panel on the right shows the following information:

| | |
|----------------|--|
| Type | Basic Substance |
| Name | Nickel |
| Einecs-No. | 231-111-4 |
| EU-Index | 028-002-00-7 |
| CAS No. | 7440-02-0 |
| GADSL category | duty-to-declare |
| REACH-SVHC | No |
| Synonyms | Ni |
| Portion | <input checked="" type="radio"/> From 5 to 10 0[%] <input type="radio"/> Fix 0 [%] <input type="radio"/> Rest 0[%] |



Adding Materials No Longer Possible

- You are not allowed to mix materials and substances at the same level. Once you add a substance, the remainder of the material must also be substances.



••• Add Second Substance

- The second substance is lead.

In this case, we're using a range of 3-5%

Note – this formulation is for illustration only – DO NOT use it for your steel

MDS - MATERIAL DATA SYSTEM - Microsoft Internet Explorer provided by EDS COE

Phipps, Kathy - EDS (RMC Troy) [9763]

MATERIAL DATA SYSTEM

Menu

Create

MDS

Ingredients

Recycle information

Supplier data

Recipient data

Log off

Ingredients

Highly toxic demo m... 900000420 / 0.01 (Node ID 900000420)

Create MDS Ingredients

GADSL

Highly toxic demo material

Nickel

Lead

Details

Type Basic Substance

Name Lead

Einecs-No. 231-100-4

EU-Index -

CAS No. 7439-92-1

GADSL category duty-to-declare prohibited

REACH-SVHC No

Synonyms

Portion

From 3 to 5 0[%]

Fix 0 [%]

Rest 0[%]

Replace

Tree search

Save

Next



Adding Additional Substances – Reading the tree

- To illustrate the different color coding, several substances have been added.
- If the name of the substance is **blue**, the substance is D on the GADSL (www.gadsl.org).
- If the name of the substance is **red**, the substance is P or D/P on the GADSL.
- If the name of the substance is underlined, the substance is on the REACH SVHC list (Substance of Very High Concern).
- If none of the above, the substance is not flagged in any way.

MDS - MATERIAL DATA SYSTEM - Microsoft Internet Explorer provided by EDS COE

Phipps, Kathy - EDS (RMC Troy) [9763]

MATERIAL DATA SYSTEM

Ingredients

Highly toxic demo m... 900000420 / 0.01 (Node ID 900000420)

Create MDS Ingredients

GADSL

- Highly toxic demo material
 - Nickel
 - Lead
 - Cobalt-dichloride
 - Sodium-dichromate dihydrate
 - Sulfur, homopolymer

Details

Type: Material (MDS)
ID / Version: 900000420 / 0.01
MDS Supplier: EDS (RMC Troy)
Name: Highly toxic demo m... (EN)
Trade name: (EN)
Internal Mat.-No.:
Std. Mat.-No.:
Symbol:
Classification: Other special metals Search
Norms/Standards: SAE 1010 + -
Inhouse Norms:
Supplier:
Remark: (EN)
Development Sample Report:

Tree search Save Next

Marking a Substance Confidential

- Since Sulfur (note UK vs US spelling) is not flagged, it is possible to mark it confidential.
- If you mark a substance confidential, only the following can see the substance:
 - All users in the MDS Creating company
 - Users in another IMDS company given specific access via Administration > Trust User

MDS - MATERIAL DATA SYSTEM - Microsoft Internet Explorer provided by EDS COE

Ingredients
Highly toxic demo m... 900000420 / 0.01 (Node ID 900000420)

Details

| | |
|----------------|--|
| Type | Basic Substance |
| Name | Sulfur, homopolymer |
| Einecs-No. | - |
| EU-Index | - |
| CAS No. | 9035-99-8 |
| GADSL category | |
| REACH-SVHC | No |
| Synonyms | |
| Confidential | <input checked="" type="checkbox"/> |
| Portion | <input type="radio"/> From 0 to 0 0[%] <input type="radio"/> Fix 0 [%] <input type="radio"/> Rest 0[%] |

Substances cannot be marked Confidential if:

- They are D, P, or D/P
- They require an application code
- They are a joker/wildcard

Save

- Periodically, you will want to Save. Certainly, when you have all the tree complete, be sure to **Save**.
- When you see the warning, you know that the system is copying the text from the English name field into the German.

The screenshot shows the MATERIAL DATA SYSTEM web interface in Microsoft Internet Explorer. The main window displays the 'Ingredients' section for a material named 'Highly toxic demo m... 900000420 / 0.01 (Node ID 900000420)'. The ingredients list includes Nickel, Lead, Cobalt-dichloride, Sodium-dichromate dihydrate, and Sulfur, homopolymer. A warning dialog box is overlaid on the interface, stating: 'The material name is multilingual! The entered value will be copied accordingly.' The dialog box has an 'OK' button.

Quick Error Check

- We're going to do a quick error check before going further.
- Click on the ✓ icon in the toolbar

MDS - MATERIAL DATA SYSTEM - Microsoft Internet Explorer provided by EDS COE

Phipps, Kathy - EDS (RMC Troy) [9763]

MATERIAL DATA SYSTEM

Ingredients

Highly toxic demo m... 900000420 / 0.01 (Node ID 900000420)

Create MDS Ingredients

GADSL

Highly toxic demo material

- Nickel
- Lead
- Cobalt-dichloride
- Sodium-dichromate dihydrate
- Sulfur, homopolymer

Details

Type: Basic Substance
Sulfur, homopolymer

Synonyms

Confidential Portion

From 0 to 0 0[%]
 Fix 0 [%]
 Rest 0[%]

Replace Tree search Save Next

Error check icon

Material Errors

- The first **Error** is because all of our % don't sum to 100 (for the from-to %, the midpoint is used). Some hardcopy datasheets only list the impurities and forget that main ingredient - in this case iron.
- The **Warning** is because the ranges selected for Nickel are wider than what is allowed in Recommendation 001 (found on the Recommendation link after login)
- The second **Error** is because I forgot to put how much Sulfur was there.
- You can highlight the problem and click Show and go directly to where the problem is, but for now, select **Cancel**.

Check - Microsoft Internet Explorer provided by EDS COE

Check Results [Check Results](#)

MDS: Highly toxic demo material 900000420 / 0.01

Error: Highly toxic demo material: Sum of fixed values and range values too small
Warning: Nickel: Range of portion may not exceed allowed percentage.
Error: Sulfur, homopolymer: No percentage specified!
Error: Highly toxic demo material: Contact must be specified

Double-click to jump to the error.

Error: Highly toxic demo material: Sum of fixed values and range values too small

All existing errors need to be eliminated before any further processing may take place.

Show Check Cancel

Adding the Last Substance

- Sulfur has been given a % of 15%
- Iron has been added and **Rest** selected.
- The **MDS** has been saved and the system fills in the percentage – 70.5% iron.

Again - this formulation if for illustration only – DO NOT use it for your steel

- Now the error check again

MDS - MATERIAL DATA SYSTEM - Microsoft Internet Explorer provided by EDS COE

Phipps, Kathy - EDS (RMC Troy) [9763]

MATERIAL DATA SYSTEM

Ingredients
Highly toxic demo m... 900000420 / 0.01 (Node ID 900000420) All data was saved
Create MDS Ingredients

GADSL

Highly toxic demo material

- Nickel
- Lead
- Cobalt-dichloride
- Sodium-dichromate dihydrate
- Sulfur, homopolymer
- Iron

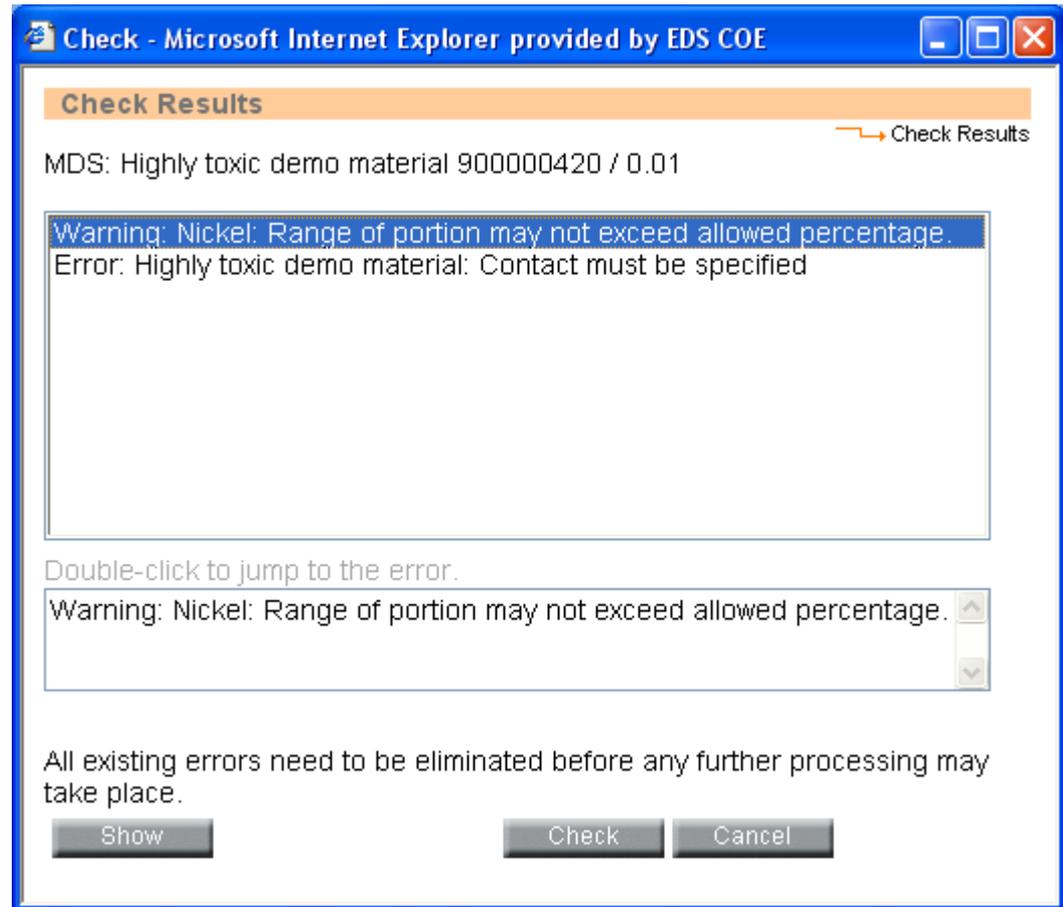
Details

| | |
|----------------|--|
| Type | Basic Substance |
| Name | Iron |
| Einecs-No. | 231-096-4 |
| EU-Index | - |
| CAS No. | 7439-89-6 |
| GADSL category | |
| REACH-SVHC | No |
| Synonyms | Fe |
| Confidential | <input type="checkbox"/> |
| Portion | <input type="radio"/> From 0 to 0 0[%] <input type="radio"/> Fix 0 [%] <input checked="" type="radio"/> Rest 70.5[%] |

Replace Tree search Save Next

Adding the Last Substance

- There's still an error - but nothing on the ingredients page.
- The system will allow you to send or release with a warning – that is not to say that your customer will accept
- Click **Cancel**
- When the window closes, click **Next**



Process Chemical Verification Flag

- Only substances existing in the final product are to be placed on the tree structure. This is especially important with the REACH regulations. When a substance considered a “processing chemical”, “liquid” or “gas” is added to the tree structure, a warning appears. In order to release the MDS, you will have to indicate how that chemical remains in the final product:
 - Intended use
 - Reaction Residue
 - Impurity
- The MDS cannot be released until the information is provided.

Ingredients
Process chemical v... 900082051 / 0.01 (Node ID 900082051)

GADSL

Process chemical verification
Xylene

Details

| | |
|---|---|
| Type | Basic Substance |
| Name | Xylene |
| Einecs-No. | 215-535-7 |
| EU-Index | 601-022-00-9 |
| CAS No. | 1330-20-7 |
| GADSL category | |
| REACH-SVHC | No |
| Synonyms | Xylene, mixed isomers, pure Benzene, dimethyl |
| Confidential | <input type="checkbox"/> |
| Portion | <input checked="" type="radio"/> From 0 to 0 0[%] <input type="radio"/> Fix 0 [%] <input type="radio"/> Rest 0[%] |
| Chemical presence type (for more than 0.1%) | <input checked="" type="radio"/> Intended use <input type="radio"/> Reaction residue <input type="radio"/> Impurity |

Microsoft Internet Explorer

You are adding a basic substance that is typically consumed or reacted during manufacturing and not appear in the finished product. Are you sure this substance remains in the finished product? If OK, then please specify the chemical type. Click Cancel to remove it from the tree structure.

OK Cancel

Recyclate Information

- The recyclate information was changed with IMDS Release 3.0. The link is still there but there is nothing you can do. Instead of clicking **Next** on the previous screen, you could have clicked **Supplier data**
- However, now that you're here, click **Next**

MDS - MATERIAL DATA SYSTEM - Microsoft Internet Explorer provided by EDS COE

Phipps, Kathy - EDS (RMC Troy) [9763]

MATERIAL DATA SYSTEM

Recyclate Information

Highly toxic demo m... 900000420 / 0.01 (Node ID 900000420) Create MDS Recyclate

Since IMDS release 3.0, recyclate information is part of the "Ingredients" screen (chapter 1).

Recyclate information is only applicable for references to materials of certain classifications under components and semicomponents.

The menu item "Recyclate information" in the left navigation menu will be removed shortly.

Back Save Next

Contact Information/Org Unit

- If your company uses Org Units (discussed in another document) you need to file this MDS there.
- Select the Contact person and the other information will be filled in automatically.

UserIDs and Contact people are created separately - if you need a contact created, ask the Client Manager.

MDS - MATERIAL DATA SYSTEM - Microsoft Internet Explorer provided by EDS COE

Phipps, Kathy - EDS (RMC Troy) [9763]

MATERIAL DATA SYSTEM

Supplier Data

Highly toxic demo m... 900000420 / 0.01 (Node ID 900000420) [Create](#) [MDS](#) [Supplier data](#)

MDS Status: Edit mode

Company: EDS (RMC Troy)
DUNS Number: -
5505 Corporate Dr.
48098 Troy, MI
US (United States)

Organisation unit:
DUNS Number:
Product 1
Product 2
Troy Plant
Waterford Plant
US (United States)

Contact Person:
Telephone No.:
Phipps, Kathy
Smith, John

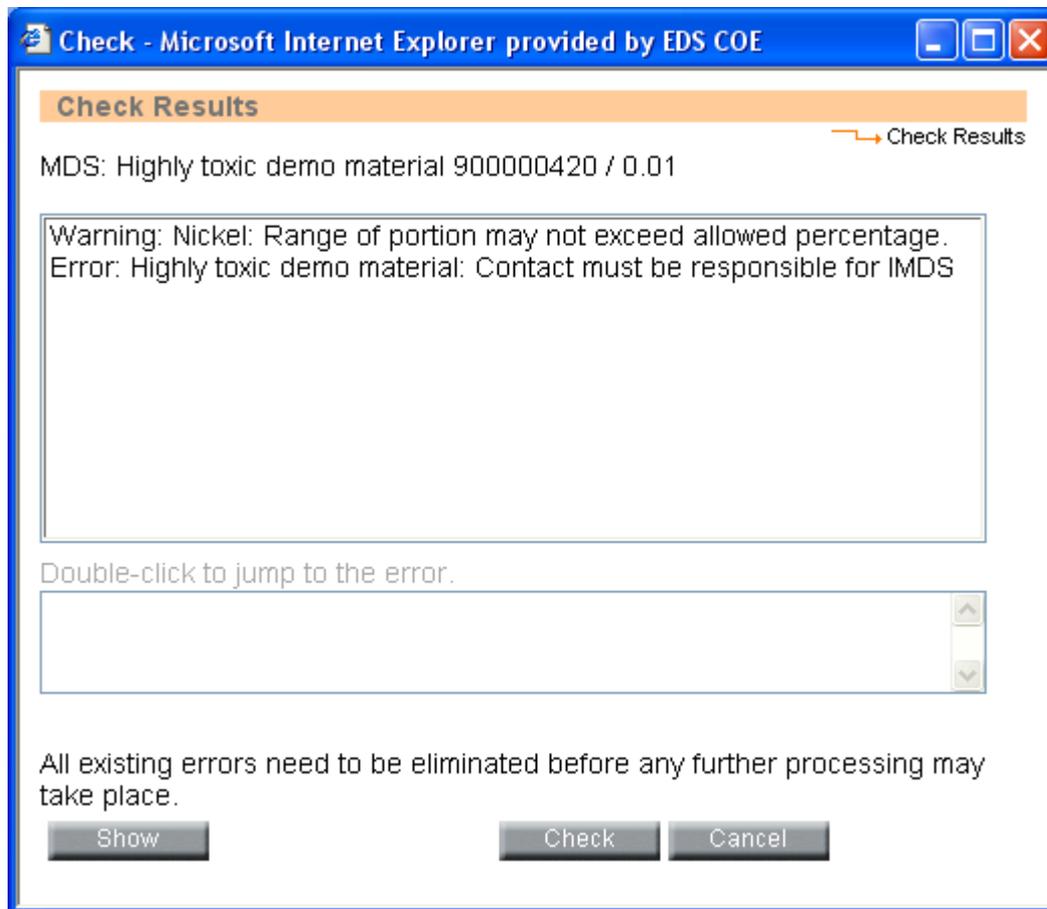
Fax No.:
E-mail:
active:

You will only see this area if your company uses Org Units and you have Org Units assigned to your profile

Select the contact person.

Problem with Contact

- When the client manager creates the contact person, the contact is designated as for IMDS, REACH, or both. In this case, I have selected a contact person who has been designated as a REACH only contact.
- Select a contact that is responsible for IMDS and click next.



••• Making MDS “Productive” - Step 1

- We need to Wrap this up to be able to use it further. Click on **Internal**.
- The same check is made so no surprises. Now you can click on **Internal**. The IMDS system allows you to release and send with warnings – that does not mean your customer will accept.

*Note – the **Send** and **Propose** buttons are grayed out – you cannot use them until you add a recipient*

The screenshot displays the MDS - MATERIAL DATA SYSTEM interface in a Microsoft Internet Explorer browser window. The main window shows the 'Recipient data' form for 'Highly toxic demo m... 900000420 / 0.01 (Node ID 900000420)'. The 'MDS Status' is 'Edit mode'. The 'Send' and 'Propose' buttons are grayed out, while the 'Internal' and 'Publish' buttons are active. A table below the form shows 'Nothing found to display.' with columns for 'No. to comp. (Org.-Unit...Name)', 'Internal Mat....', 'Drawing No.', and 'Recip. Status'. A 'Check Results' dialog box is open in the foreground, displaying a warning: 'Warning: Nickel: Range of portion may not exceed allowed percentage.' The dialog box also includes a 'Show' button and 'Internal' and 'Cancel' buttons.

••• Making MDS “Productive” - Step 2

- And answer **OK**

The screenshot displays the MDS MATERIAL DATA SYSTEM interface in Microsoft Internet Explorer. The main window shows the 'Recipient data' section for 'Highly toxic demo m... 900000420 / 0.01 (Node ID 900000420)'. The MDS Status is 'Edit mode'. A table below shows 'Nothing found to display.' with columns for 'No. to comp. (Org.-Unit...Name)', 'Internal Mat....', 'Drawing No.', and 'Recip. Status'. A 'Warning: Nickel: Range of portion may not exceed allowed percentage.' is displayed in a text box. A 'Microsoft Internet Explorer' dialog box is overlaid, asking 'You are about to release this MDS for internal use. Continue?' with 'OK' and 'Cancel' buttons. The 'Check Results' window also shows the warning and a 'Show' button.

Changes

- Note the changes
- Version number,
status and buttons

The screenshot shows the MDS - MATERIAL DATA SYSTEM interface. The browser title bar reads "MDS - MATERIAL DATA SYSTEM - Microsoft Internet Explorer" and "provided by EDS COE". The user is identified as "Phipps, Kathy - EDS (RMC Troy) [9763]". The interface includes a navigation menu on the left with options: Menu, Search, MDS (Ingredients, Recycle information, Supplier data, Recipient data), and Log off. The main content area displays "Recipient data" for "Highly toxic demo m... 900000420 / 1 (Node ID 900000420)". The "MDS Status" is "Internally released". A callout bubble points to the version number "900000420" with the text "Version number now a whole number". Below the status, there are buttons for "Send", "Propose", "Internal", and "Publish". The "Internal" button is grayed out. A callout bubble points to the "Internal" button with the text "Now Internal is also grayed out - you can still Publish and Propose, should you add a recipient". Below this, a table header is visible with columns: "No. to comp. (Org.-Unit)", "Name", "Internal Mat.-...", "Drawing No.", and "Recip. Status". The table content is "Nothing found to display.". A callout bubble points to the "Internally released" status with the text "Status Change". At the bottom of the table area, there are buttons for "Back", "Add recip...", "Search", "ult", and "Save".

- 900000420 - the position in the data base, what is commonly referred to as the **IMDS ID**
- 1 - Version number. If a decimal (.01, .02, .03, etc.) Ingredients and Supplier data can usually be changed (exception is if it has been **sent** to a customer and in “handshake” mode). If a whole number, no changes can be made on these pages. However, it may be proposed to a recipient.
- Node ID – of value to people who have paid to use IMDS through either our Advanced Interface (AI) or Advanced Accelerator (imds-a2)

Recipient Data

Highly toxic demo m... 900000420 / 1 (Node ID 900000420)

Publish or Internally Release

- OEMs will not accept published data. Most suppliers will not accept published data. For that reason, the publish button has been deactivated in Release 7.0 except for special circumstances. Those circumstances can be found in Public Pages > FAQ > General Info > What's new in Release 7.0 and in Public Pages > FAQ > Faster Data Entry & IMDS Administration > What administration functions can a Client Manager perform?
- 99% of users **NEVER** Publish. We highly recommend not publishing the MDS. Publishing allows the MDS to be seen by anyone with an IMDS UserID. Internally Releasing allows only those in your IMDS company to use the MDS. If you want your customer to see it, then you need to use Send or Propose after adding a recipient (later in this document). However, if you supply a standard component or material to many customers, then publishing is acceptable.
- WARNING ABOUT USING PUBLISHED MDSs - because anyone can publish, it is recommended that you NOT use any published MDSs ***unless they were published by your supplier, the IMDS Committee or the manufacturer of the material.*** No one is responsible for checking the quality of published MDSs.
- WARNING ABOUT PUBLISHING IF YOU DON'T MAKE THE MATERIAL - your company's name and contact information is on the datasheet. Who do you think someone will call if there is a question or problem in the future? And if the material is a Trademarked material and you do not manufacture it, lawyers may become involved.



Create a Module/Material – “Special Materials”

- There are 4 material classifications that require a material symbol and the IMDS system guides you in creating that symbol:
 - 5.1.a Filled Thermoplastic
 - 5.1.b Unfilled Thermoplastic
 - 5.2 Thermoplastic Elastomer
 - 5.3 Elastomers/ elastomeric compounds
- Since all of these follow basically the same pattern in creating the symbol by using a wizard, we will only cover 5.1.a in this document.

MDS - MATERIAL DATA SYSTEM - Microsoft Internet Explorer provided by EDS COE

Phipps, Kathy - EDS (RMC Troy) [9763]

MATERIAL DATA SYSTEM

Creation of a new material

→ Create → MDS → Material

Selection of the material classification

Maybe this material already exists in IMDS.
If you are unsure about that, here you can jump to the material search.

First of all, please select the material classification:

| Classification | Description |
|----------------|---|
| 4.1 | Platinum / rhodium |
| 4.2 | Other special metals |
| 5 | Polymer materials |
| 5.1 | Thermoplastics |
| 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 | Polymeric compounds (e.g. inseparable laminated trim parts) |
| 5.5.1 | Plastics (in polymeric compounds) |
| 5.5.2 | Textiles (in polymeric compounds) |
| 6 | Process polymers |
| 6.1 | Lacquers |
| 6.2 | Adhesives, sealants |

Using the Symbol Wizard – Filled Thermoplastic

MDS - MATERIAL DATA SYSTEM - Microsoft Internet Explorer provided by EDS COE

Creation of a new material

Composition of the material symbol

The selected material classification permits creation of Name a selections derived from the MDS Basic Polymer List. Therefore terms suitable for the material.

Classification:

Basic polymers ISO 1043-1:

Fillers/reinforcing materials ISO 1043-2:

Plasticizers ISO 1043-3 (optional):

Flame retardants ISO 1043-4 (optional):

Composed symbol:

It is also possible to apt the symbol manually (lowercase letters, glassfibre GF and mineral filler MD). Here you can add "()" manually.

Next

- ABS
- ABS+ASA
- ABS+PA6
- ABS+PBT
- ABS+PBT-I
- ACS
- AEPDS
- AES
- AMMA
- APAO
- AS
- ASA
- CA
- CAB
- CABPMA
- CAP
- CF
- CMC
- CN
- COC
- COP
- CP
- CS
- CSF
- CTA
- E/P
- EA
- EC

Select your basic polymer from the pull down

You need to select the category based on ISO 1043-2 – you cannot make up your own. Technically, you can click **Next** without filling in the information, but you shouldn't.

You can purchase the ISO 1043-2 doc from www.iso.org.

As you are making selections, the symbol is being composed.



Add the Substances

MDS - MATERIAL DATA SYSTEM - Microsoft Internet Explorer provided by EDS COE

Phipps, Kathy - EDS (RMC Troy)

Ingredients
ABS 900000421 / 0.01 (Node ID 900000421)

Menu
Create
MDS
Ingredients
Recycle information
Supplier data
Recipient data
Log off

GADSL

ABS

Details

Type Material (MDS)
ID / Version 900000421 / 0.01
MDS Supplier EDS (RMC Troy)
Name ABS (EN)
Trade name (EN)
Internal Mat.-No.
Std. Mat.-No.
Symbol ABS-GF5 P FR Edit
Classification filled Thermoplastics Search
Norms/Standards ISO 1043
Inhouse Norms
Supplier
Remark (EN)
Development Sample Report

Tree search Save Next

The Material is given a basic name – you can edit

Since this is according to ISO 1043 you will need to enter it here

All the rest of the information is as before

The Symbol has been created, but there is an **Edit** button

Finish as Normal

- In this case, I am using 2 jokers/wildcards. The Plasticizer is 3-5% with a weighted mean of 4% and the Flame Retardant is Rest or 6%.

The screenshot shows the MDS - MATERIAL DATA SYSTEM web interface. The main content area displays the 'Ingredients' section for 'ABS 900000421 / 0.01 (Node ID 900000421)'. A tree view on the left shows the hierarchy: ABS, GF-Fibre, Plasticizer, not to declare, and Flame Retardant, not to declare. The 'Details' panel on the right shows the following information:

| | |
|----------------|---|
| Type | Basic Substance |
| Name | Flame Retardant, not to declare |
| Einecs-No. | system |
| EU-Index | system |
| CAS No. | system |
| GADSL category | |
| REACH-SVHC | No |
| Synonyms | |
| Confidential | <input type="checkbox"/> |
| Portion | <input type="radio"/> From 0 to 0 0[%] <input type="radio"/> Fix 0 [%] <input checked="" type="radio"/> Rest 6[%] |

Buttons at the bottom include 'Replace', 'Tree search', 'Save', and 'Next'.

Run the check

- In this case, I am using 2 jokers/wildcards. The Plasticizer is 3-5% with a weighted mean of 4% and the Flame Retardant is Rest or 6%.
- We have a warning

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MATERIAL DATA SYSTEM

Ingredients
ABS 900000421 / 0.01 (Node ID 900000421)

Create MDS Ingredients

GADSL

Menu
Create
MDS
Ingredients
Recyclate information
Supplier data
Recipient data

Details

Type Basic Substance
Name Flame Retardant, not to declare
Einecs-No. system
EU-Index system
CAS No. system
GADSL category
REACH-SVHC No
Synonyms
Confidential Portion
 From 0 to 0 0[%]
 Fix 0 [%]
 Rest 6[%]

Save Next

Check - Microsoft Internet Explorer provided by EDS COE

Check Results

MDS: ABS 900000421 / 0.01

Check Results

Warning: ABS: More than 10% not specified substances. ("Not specified")
Error: ABS: Contact must be specified

Double-click to jump to the error.

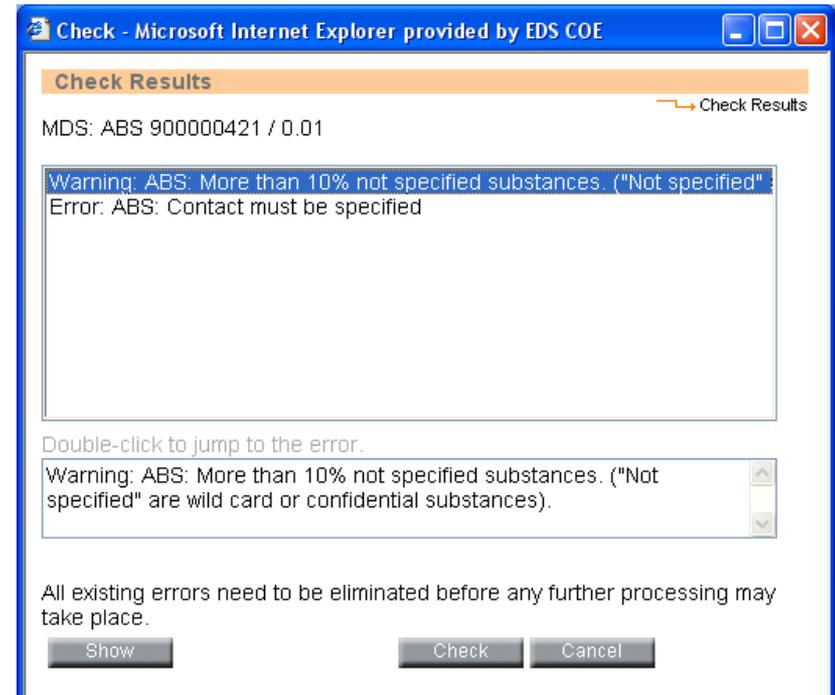
Warning: ABS: More than 10% not specified substances. ("Not specified") are wild card or confidential substances.

All existing errors need to be eliminated before any further processing may take place.

Show Check Cancel

Why the 10% Warning?

- The 10% warning requires a bit of understanding on how the calculations work.
 - Joker - Plasticizer is from 3 to 5% - weighted average 4%
 - Joker – Flame Retardant - REST - 6%
- But
 - Even though the Plasticizer a has a weighted average of 4%, it COULD have as much as 5% in the material
- So really in this case, the total of unknown is 5% + 6% or 11% which fails the Recommendation 001 10% rule check.



Note – Make sure you read Recommendation 001 which is found on the Recommendation link after login. You should also read other Recommendations if they pertain to your product.

••• In Conclusion: Ask Your Customer

- IMDS is a common system for data, but each OEM and many Tier 1's 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 Public Pages

- Many questions can be answered from the Public Pages > **FAQs**. Chances are you are not the first person who has asked this question and the Level 2 helpdesk has placed common questions on the site.
- 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. You are expected to read them. At the moment the helpdesk is free of charge to users, as is IMDS itself. We simply do not have the resources at the helpdesk to respond answering the same question individually to 50,000 users.