

iPCA/IHS

Option: MACSI



Imprint

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I Introduction

This documentation describes the functionality of the module "MACSI". This module allows to convert existing, complete MDS into a format, which can be enhanced with MACSI specific information and then to send this to the MACSI system.

The module "MACSI" is optional and accessible only for users with the permission "MACSI".

Specific information about the application iPCA/IHS is placed in the corresponding documentation.



2 New functions

7.11.000 or 7.08.005

- Changes for MACSI 2010, see chapter 4.5.1 and corresponding extensions in chapter 4.5; due to these changes some editing screens have been changed which now do not correspond to this document.
- Change of adding and deleting of basic substances, see chapter 4.5.2.1

6.09.003

- Changes for MACSI plus
 - Declaring Basic Substances within Macsi materials, see mainly chapter 4.5.2.1.
- Additional display of IMDS data if available



3 General information

3.1 Support

For any questions about the application please contact your in-house administrator.

This administrator will check and answer your enquiry

If your in-house administrator can not solve the problem, he will contact iPoint-systems gmbh to get a solution for it.

It is important that only the in-house administrator contacts iPoint-systems gmbh as this is the only way to get a fast response and to avoid doing the work twice.



4 Working with the option "MACSI"

4.1 Status of MACSI MDS

MACSI MDS may have different status.

- Edit mode
 - The MACSI MDS is in edit mode and can be modified.
- Ready

The status was set to "ready" (prerequisite for upload).

- The MACSI MDS can not be changed.
- The status can be reset to "edit mode"
- Prerequisite for this status is a release check
- Upl. mode

An upload to the MACSI system was requested but not yet started (background process which runs in intervals)

- Upl. Active
- The background process "upload" is currently transferring the MACSI MDS to the MACSI system sent
 - The datasheet was sent successfully to the MACSI system
- Upl. failed
- The upload to the MACSI system failed. The reason for the problem is documented in the panel "MACSI upload". Please refer to 4.6 "Transfer to the MACSI system" starting on page 27. Accepted
- The uploaded datasheet was accepted by PSA.
 - This status must be set manually!

For details please refer to 4.5.2 ",Detail information" starting on page 13.



4.2 Create from scratch

A MACSI MDS can be created direct from the menu "create MDS/module" (\Box).

In the follow up dialog the button "M MACSI" in the area "create MACSI MDS" must be used after entering a part name.

Please make your choice:						
-Create IMDS-MDS/Module:						
Part-/Item-/Material-No.:						
MDS						
Component	Semicomponent Material					
Module						
Component	Semicomponent Material					
Create Honda-Module:						
Part name:	Component					
Create MACSI MDS:						
Part-Name:	MACSI					
	Cancel					

Figure I: Create a new MACSI MDS

After selecting the button "M MACSI", the window to edit a MACSI MDS will open. Please refer to chapter 4.5 "Editing a MACSI MDS" starting on page 12.

4.3 Create from editing a MDS

A MACSI MDS can also be created from an existing IMDS MDS/module. The original MDS/module will not be deleted during this operation.

Using the button " \mathbb{M} " in the edit screen for MDS/modules, a MACSI MDS will be created from this MDS/module.

Following information will be transferred:

• All found materials are added as MACSI materials. If a MACSI substitution is available for the IMDS material, the MACSI substitute will be used, otherwise the assignment must be done manually. Details are described in chapter 4.5.2.1.3 "Information about MACSI materials" starting on page 15.

After the creation of the MACSI MDS the edit window for it will open. Please refer to chapter 4.5 "Editing a MACSI MDS" starting on page 12.

If there is already a MACSI MDS for the current IMDS module, following selection is available:



Figure 2: Question when a MACSI MDS is already available

Following actions are available:

• Delete existing and create new: The existing MACSI MDS will be deleted, then a new MACSI MDS will be created from the current IMDS module.

This is helpful if the IMDS module has changed.

• Open existing: The existing MACSI MDS will be opened, the data stays unchanged.

4.4 Searching for MACSI datasheets

Using the default search (&) also MACSI can be searched. To search for MACSI MDS, please use the tab "MACSI".

Following function for searching is available:

6	Search MDS/module											
ſ	Component Semicomponent Material Basic substances all MDS/modules Honda Search MACSI											
ſ												
	Part-Name:						PSA-Part-Name:					
	Part-Number:						PSA-Part-Nu	mber:				
	S	ate:				~	PSA-No.:					
ľ			(Search	Reset		Info: 7	rows foun	d!			
2	D at											
		PSA-No	Part name	Part number	PSA part number	PSA part name	PSA version	State	Upload date	Upload user	Creator	Creatio
	1		666 mal					Edit mode			system-IP\$VVORK	Oct 5, 2
	2	219	CENDRIER BASC	9653500177	9653500177	CENDRIER BASCULANT		Edit mode	2006-08-10	system-IP\$VVORK	system-IP\$WORK	Sep 4,
	3	222	DISPLAY	manuellumbena	9653500480	JOINT HAUT-PARLEUR		Edit mode	2006-08-10	system-IP\$VVORK	system-IP\$WORK	Sep 4,
	4	221	GEHAEUSE VST	FF_0230961	9653500380	RAMPE ALIMENTATION I		Edit mode	2006-08-10	system-IP\$VVORK	system-IP\$VVORK	Sep 4,
	5	216	RESERVOIR HY	4711	9611002380	RESERVOIR HYDRAULIQ		Edit mode	2006-08-10		system-IP\$VVORK	Sep 4,
	6	220	Schachtel	97-abc	9653500277	CENDRIER BASCULANT	0	Edit mode	2006-08-10	system-IP\$VVORK	system-IP\$WORK	Sep 4,
	7	218	hugo	08/15-1	9653500077	BOITIER CENDRIER	0	Edit mode	2006-08-09	мм	system-IP\$VVORK	Sep 4,
	Load Upload Reset State Delete Export											

Figure 3: Searching MACSI MDS

The screen is structured into two areas:

- Search criteria (red area)
- Search result list (green area)

4.4.1 Search criteria

Search criteria can get combined as desired.

So called ,wildcards' can be applied for the search criteria: an asterisk (*) is valid for any characters, which follow one another, a question mark (?) represents exactly one character at the given position. E.g. a part no. may contain



If more than one search criterion has been entered the database of the In-house-System will search for data fulfilling all criteria (it is an 'and-link').

After entering the search criteria the search can be started by pressing the ,search' button. By choosing the ,reset' button all search criteria will set back to the origin.

Following search criteria are available:

- Part number Number of the MACSI MDS
 - The entry will be expanded with a "*" at the end automatically.
- Part name

The name of the part assigned to the MACSI MDS.

The entry will be expanded with a "*" at the end automatically. The search is not case sensitive.

- PSA part name The PSA name of the MACSI MDS
- PSA part no
 - The PSA part number of the MACSI MDS
- PSA no
- The PSA number of the MACSI MDS
- Status

The status can be selected from a list.

Details about the status are described in chapter 4.1 "Status of MACSI MDS" starting on page 7.

4.4.2 Search result list

If datasheets were found, they will be displayed in the search result list. Each line represents a MACSI MDS which fits to the search criteria.

If no datasheets were found, the message "no data found" pops up.

4.4.2.1 Sorting

The default sort is

- Part name
- Part number

4.4.2.2 Design

The column meanings:

- Column PSA-No The PSA number which was entered for the MACSI MDS
- Column part name
 - The name which was entered for the part.
- Column part number The part number which was given to the part
- Column PSA-Part Number
- The PSA part number given in the MACSI MDS
- Column PSA part name The PSA part name mentioned in the MACSI MDS



PSA Version

The given PSA version of he MACSI MDS

- Column Status The current stats of the MACSI MDS.
- Der aktuelle Status des Datenblatts.
- Details about the status are described in chapter 4.1 "Status of MACSI MDS" starting on page 7.
 Column Upload Date
- If the datasheet is already uploaded to MACSI, this column show that transfer date to the PSA system Column Upload User
- If the datasheet is already uploaded, the name of the user who did the upload is mentioned here
- Column create date Date, the MACSI MDS was created

4.4.3 Modifying the search result list

The list can be modified by the user

- Sort
 - by clicking on the "title" of a column the list will get sorted ascending. By double click the list gets sorted descending. The current sort sequence will get displayed by the following symbols (▲, ▼).

Teile-

Change of column width

By pulling the strip line between different columns (

4.4.4 Actions on entries in the search result list

Following actions can be taken to the selected datasheet:

- Load
 - using this button, the MDS will be opened for editing.
- Upload

An order for an upload to the PSA system will be invoked.

The upload will be done in the background in regular intervals.

For details please refer to chapter 4.6 "Transfer to the MACSI system" starting on page 27.

- Reset Status
- With this button, an ordered upload which has not yet started can be reset.
- Delete



Figure 4: Confirmation when deleting a MACSI MDS

The datasheet will be deleted.

Attention: There is no way to recreate the deleted datasheet.



Export

This button can export the result to a CSV or excel-file. By using this button the following pop-up will appear:

Export Search-Result
Choose the export type:
⊙ Export data as a CSV document.
◯ Export data as a XLS document.
Choose the destination folder to save the export file.
Folder
Save Cancel

Figure 5: Export of a search result list

Please choose your desired format and the path in order to save the file (press "Save" or if you don't want to save, press "Cancel").

4.5 Editing a MACSI MDS

The edit panel is divided into three areas:

MMACSI - Handbook	
■ % % 8 # 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
M Ha	Ingredients Producer Upload
- Nobles Materials	Part-Name: Handbook
Electronic Parts Annex-II	Part-Number:
	Part-Index:
	State: Edit mode
	Weight: kg 🗸 📄
	Tolerance: 3
	IHS-Comment:
	PSA-Data:
	PSA-No:
	PSA-Part-Number:
	PSA-Part-Name:
	PSA-Version:

Figure 6: MACSI edit panel

- Edit functions (red area)
 - For details please refer to 4.5.3 "Edit functions" starting on page 21.
- Tree view (green area)
 - The tree view is divided into two to four groups, depending of the create date
 - o MACSI materials
 - o Nobles materials, only before MACSI 2010 and if existing entries
 - Electronic Parts, only before MACSI 2010 and if existing entries
 - o Annex-II



Detail information (blue area)
 For details please refer to 4.5.2 "Detail information" starting on page 13.

4.5.1 Summary of the changes for MACSI 2010

Following changes were applied for the new version of MACSI 2010, more information is described on the following pages of this chapter:

- Change of the structure (see above page 12 and extensions on the following pages)
 - There are no more groups for Nobles Materials and Electronic Parts for newly created datasheets
 - An additional marking for polymer parts is necessary.
- Changed/extended material catalogue
 - For most of the materials recyclate values are available
 - Changed/additional questions for some materials, e.g.
 - new questions are necessary for Elastomers
 - no type is necessary for Steel
 - for Wood, papers... a type is necessary
 - New subdivision of existing materials, e.g. Paint and surface treatment, Fluids & Greases
 - New materials, e.g.
 - Noble metals for replacing the Nobles Materials
 - Mastics, Gue Adhésive
- Therefore the substitution list for MACSI materials should be reviewed, see chapter 5.2
- Additional fields for basic substances, see page 16

4.5.2 Detail information

The detail information for the four MACSI groups is related to the information necessary for the MACSI system. If the MACSI system provides a value list for a specific entry, also in iMDS/HIS you find a selection list for this entry.

Mandatory fields are marked with a colored background.

The detail view is divided into three areas:

- Ingredients
 - Please refer to 4.5.2.1 "Ingredients" starting on page 13.
- Producer
 Please refer to 4.5.2.2 "Producer" starting on page 18.
- Upload
 Please refer to 4.5.2.3 "Upload" starting on page 20.

4.5.2.1 Ingredients

4.5.2.1.1 General

In the ingredients area the detail information to the nodes selected in the tree are displayed and can be changed here.

Depending on the type of node (MACSI material, noble material, electronics or Annex-II) specific fields are available.

If there is a value list available for an entry field, these values can be selected from a list by using the arrow (\checkmark) right from the entry field.

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Using the calculator symbol () weights from the sublevel nodes will be added and placed in the related total weight field. For the total weight all entries are added which require weight information, for the material weight only the MACSI materials are added below the node MACSI-Materials. If the material weight falls beyond the tolerance (+/- 3% of the total weight) the user will be informed by a hint. By clicking the corresponding button the user can decide which weight should be applied to the weight field.

Mandatory fields are marked with a colored background.

Since MACSI 2010 there are only two groups available within the tree for datasheets in edit mode: MACSI-Materials and AnnexII when no entries for Noble Materials and Electronic Parts exist in the tree structure. Also new or changed material questions are available and for substances additional fields were added. For existing datasheets in the MACSI system the old entry form is shown to be filled in. For newly initialized datasheets a new, shortened form is available in which also a polymer marking selection has to be done. Which form has to be filled in is decided by the portal and therefore these fields are available in the actual IHS MACSI module. Therefore it may be that the IHS datasheet comprise the selected polymeric marking and/or the additional edited substance fields but the MACSI system do not. Due to compatibility to elder datasheets it may occur that the sequence of the material questions differ from that in the MACSI system.

Ingredients P	roducer Upload
Part-Name:	Handbook
Part-Number:	
Part-Index:	
State:	Edit mode
Weight:	kg 💙 🔳
Tolerance:	3
IHS-Comment:	
PSA-Data:	
PSA-No:	
PSA-Part-Num	nber:
PSA-Part-Nam	ne:
PSA-Version:	

4.5.2.1.2 Details about the MACSI MDS

Figure 7: Details about a MACSI MDS

Following fields are available

- Part name
 - The name which was entered for the part.
- Part number
 - The part number which was given to the part
- Part index The index of the part



State

The current state of the MDS

- Weight
 - The total weight of the part.

The sum of the weight of **all entries** which require weight information can only differ from this total weight to the given tolerance, otherwise the upload to MACSI is not possible!

- Tolerance
 - The weight tolerance given by PSA and corresponding to the total weight of the part:
 - \circ total weight >= 10 kg: +/- 3%
 - \circ I kg <= total weight < 10 kg: +/- 2%
 - total weight < 1 kg: +/-1%
- Polymer Marking

Since MACSI 2010 a marking is required for parts which contain thermoplastic and/or elastomer materials. With the selection of "Not set" the information can be reset. A short description of the MACSI system is available by clicking the button on the right hand side of the selection buttons.

IHS-Comment

An internal comment field which cannot be transferred to MACSI

- PSA-No
 - The PSA datasheet number as unique key for PSA which is given by PSA
- PSA-Part number
 - The part number given by PSA
- PSA Project

The project number given by PSA. It can be changed once supplementary when the state is "Accepted". PSA Cutting

- An input field given by PSA. It can be changed once supplementary when the state is "Accepted".
- PSA part name

The part name given by PSA

- PSA Version
 - The version of the datasheet which was created by MACSI during initialization of the datasheet.
- PSA Interior Part

Marks a part which is used inside of vehicle interior. The supplier gets this information by the PSA contact person. For the selection of basic substances (see chapter 4.5.2.1) there are additional substances available which must be selected only when this mark is set.

 PSA Comment A comment field given by PSA.

4.5.2.1.3 Information about MACSI materials

Name:	Stainless					
Type of coating:	Aluminium coated		~			
Weight:		3.0	<mark>g - ~</mark>			
Pos-No:		6				
Declarable Basic Subs	Declarable Basic Substances					
Basic Substance	Thre	eshold (%)) All Col. Vers.			
BIS(2-ETHYLHEXYL) PHTH	HALATE	0.0) <mark>5</mark>			
HEXABROMOCYCLODODECANE		0	.9			

Figure 8: Information about MACSI materials and basic substances (if necessary)



Following values have to be entered

- Weight
 - The weight of the material regarding the complete part
- Position
 - The position of the material in the tree
- If the selected material is a plastic material (category "Polymers Thermoplastics"), then the optional field tradename can be entered.

Attention: the available entry fields are dependant from the selected material.

If basic substances were added to the selected material they were shown additionally in the lower part of the material detail screen. For each substance following data have to be entered:

Threshold (%)

The percentage of the substance within the material.

All Col. Vers.

If this basic substance is contained in all color versions then the checkbox has to be selected. In the other case the question will be answered with No during the upload to the MACSI Online System.

Since MACSI 2010 following entry fields are available:

- Security measures
 - This is a mandatory field.
- Authorization No
- Color code

For the functional meaning please refer to your PSA contact.

Conversion from an IMDS MDS

If the material entry was made by a conversion from an IMDS MDS, and if for this material does not already exist an association to a MACSI material, this must be done manually.

This will be visualized by the name prefix "IMDS" and by the missing MACSI category for the material.

Using the button 🗐, a MACSI material can be associated manually.

WF1 MACCL Materials MDS: 000r6 [447874] PA amide based TP [PA-Glass balls (GB)-10-Without 2nd type of fillers-0-Non cc Glass Nobles Materials	Name: IMDS ID/Version: IMDS Name:	447874 100Cr6	447874 / 1
Annex-II	Weight: Pos-No:	1.0	g

Figure 9: Material transferred from IMDS

Using the button 🖾 the standard MACSI material selection will open. The required material category can be selected from this list.

For details please refer to chapter 4.5.3.1 "Add MACSI material" starting on page 22.

All associations between IMDS and MACSI materials will be documented using the substitution management. For details please refer to chapter 5 "Translation table IMDS to MACSI Materials" starting on page 30.

If a new conversion is done and an IMDS material is found for which exists an association to a MACSI material then this MACSI material is used and will be inserted to the MACSI MDS. If there exist several IMDS materials in an IMDS MDS which are mapped to the same MACSI material, then this single MACSI material will be inserted and the weight of all IMDS materials will be accumulated to that MACSI material.

The accumulation of the weight is also done during the manually association (if the user commits a question), if a material is selected which already exists in the MACSI MDS.



If an IMDS material contains basic substances which are listed in the PSA substance list, then these substances will be transferred to the MACSI material. The identification is performed by the CAS No., for the PBDE-, PBB- und RFC-substances an internal mapping was defined (see column IMDS CAS No. in the PSA substance list, available from V6.10).

If several IMDS materials are mapped to the same MACSI material or an existing material is selected during the manually material mapping, the percentages of same substances will be converted to their total percentage and additionally the substance percentage will be adapted to the summarized material weight (by computing the substance weight portion), i.e. the percentages may change during the conversion from an IMDS material!

4.5.2.1.4 Information about noble metals



Figure 10: Information about noble metals

Values needed to be entered

- Weight
 - The weight of the material regarding the complete part
- Position The position of the material in the tree

Since MACSI 2010 it is no more possible to add noble metal material in the MACSI system for newly initialized datasheets. Existing entries for noble metals should be deleted and should be added as materials. A corresponding warning will be shown during checking the datasheet.

If an old datasheet with existing noble metals is uploaded to the MACSI system but a new entry format is expected then the upload will be interrupted and a corresponding upload error message occurs.

4.5.2.1.5 Information about electronic parts

Name:	batteries
Amount:	
Pos-No:	1

Figure 11: Information about electronic parts

Values needed to be entered

- Amount
 - The amount of electronic parts used
- Position

The position of this electronic part in the tree

Since MACSI 2010 it is no more possible to add electronic parts in the MACSI system for newly initialized datasheets. Existing entries should be deleted and added as materials. The checker and upload act as described above for the noble metals.



4.5.2.1.6 Information about Annex-II Exception

Name:	Corrosion preventive coatings (1.7.2007)
Pos-No:	1

Figure 12: Information about electronic parts

Values needed to be entered

Weight

Only for Annex-II codes 8(a-j) and 10.

 Position The position of Annex-II exception part in the tree

4.5.2.2 Producer

The area "producer" is used for all information about the responsible person, which is necessary for a MACSI MDS.

Using the selection list in the upper right corner the information from existing IMDS contacts can be selected for usage.

Ingredients Producer Upload					
		Contacts:			
Name:		~			
First name:					
Department:					
Phone:					
Fax:					
Email address:					
Signatory Last Name:					
Signatory First Name:					
Signatory Function:					
Signatory Phone Number:					
By checking the checkbo	ox, I recognize that	٩			

Figure 13: Information about Producer

Values needed to be entered

- Name
 - The last name of the contact person
- First name

The last name of the contact person



- Department
- The department
- Phone
- The phone number
- Fax
- The fax number
- Email address
- The email addressSignatory last name
- The last name of the signing person
- Signatory first name
 The first name of the si
- The first name of the signing person
- Signatory function
- The function of the signing person
- Signatory phone number
- The phone number of the signing person
- Conformity confirmation

The text of the conformity confirmation can be read using the button	Ľ	The compli	ance with	it will be
confirmed by setting the hook (🗹).				

MACSI - Certificate of Conformity
By checking this checkbox, I recognize that I'm agree with the certificate of conformity relating to the use of lead, mercury, cadmium and hexavalent chromium, and engagements taken by the company I represent, and I accept them.
Certificate of Conformity relating to the use of lead, mercury, cadmium and hexavalent chromium Article 4.2.a of the Directive 2000/53/EC of 18th September 2000 relating to end of life vehicles stipulates that "materials and components of vehicles marketed after the 1st July 2003 do not contain lead, mercury, cadmium or hexavalent chromium in any other cases than those listed in annex II in the conditions stipulated therein".
The signatory Supplier declares hereby to take all necessary steps to ensure that the product referenced above, and all its range of colours versions, intended for the PSA PEUGEOT CITROËN Group conforms to article 4.2.a of the aforementioned Directive.
The Supplier guarantees consequently that the product referenced above, supplied to the PSA PEUGEOT CITROËN Group does not contain lead, cadmium, mercury, hexavalent chromium in any other cases than those listed in annex II of the aforementioned directive in the conditions stipulated therein.

Figure 14: Declaration of conformity



4.5.2.3 Upload

The area upload not only the information about processed uploads but also information about the current MACSI status is available.

Ingredients Producer	Upload
State:	Edit mode
Upload user:	
Upload date:	
Upload Error:	
Submission date:	
Date of Acceptance:	
Rejection date:	
Reject reason:	

Figure 15: Upload information

Following information is available:

- State
- Status of the MACSI MDS
- Upload user

•

- Name of the user who initiated the upload Upload date
- The date of the upload initiation
- Upload error: error messages from the upload (if any)
- Submission date
 - date the MDS was transferred into the portal
- Date of Acceptance date the MDS was accepted. This field can be changed once supplementary when the state is "Accepted".
 Rejection date
- Date the MDS was rejected
- Reject reason Reason for rejection (if rejected)



4.5.3 Edit functions

Using the edit panel, only those buttons are active which can be used for the current context.

P	Add electronic part / Annex-II exception Depending on the context an electronic part or an Annex-II exception can be added. For details please refer to 4.5.3.2 "Add Electronic part" starting on page 24 or 4.5.3.4 "Add Annex-II Exception" starting on page 25.					
Q 2	Add material Depending on the context a MACSI material or a noble metal will be added. For details please refer to 4.5.3.1 "Add MACSI material" starting on page 22 or 4.5.3.3" Add Noble Metal" starting on page 24.					
	Add Substance / Change substance list If a material is selected then basic substances can be added to this material or the existing list of substances can be changed. For details please refer to 4.5.3.1 "Add MACSI material and/or Basic substances".					
X	Delete Using this button structures can be removed from the MACSI MDS.					
	Recover deleted node If a node was deleted (the text is cancelled), this button can recover the deleted node. Macon Macon Materials Macon Materials Electronic Parts batteries Annex-II Corrosion preventive coatings (1.7.2007) Figure 16: Recover a deleted node					
8	Save This button saves all data.					
8	Refresh The current MACSI MDS will be reread from the database. Attention: All unsaved entries will be lost!					
2	Open tree The tree will be opened from the current position.					
é	Close tree The tree below the current position will be closed.					



4.5.3.1 Add MACSI material and/or Basic Substances

The adding of MACSI materials is analogue the portal MACSI. After using the button "add", the selection list will open:



Figure 17: Add MACSI Material and Basic Substances

Depending on the selected material additional information is required. Details about this can be found in the documentation of the portal MACSI.

The detail information about the selected materials is also available for editing after selecting and applying the material to the MACSI MDS.

Introducing MACSI plus a declaration of basic substances is necessary if the material contains one of the provided substances of the PSA list of declarable basic substances. Details about this can be found in the documentation of the portal MACSI.

For this case the user can add basic substances to the selected material information by selecting one ore more substances in the list in the lower part of the screen (multiple selection is done by Ctrl-Click or Ctrl-A for selection of all rows, the selection can be removed by another Ctrl-Click).

Attention: Basic substances which must only be used within interior parts (see Details about Macsi MDS) are marked by PSA as "Yes" in the column "Only QAH".

With pressing of "Validate" the material and the substances (if selected) are added to the MACSI MDS. The newly added basic substance(s) are listed in the material detail screen and additional substance data have to be edited, therefore see chapter 4.5.2.1.3.

If a MACSI material was selected which already exists within the MACSI MDS then an error message will appear and the selection will be cancelled.

Introducing MACSI 2010 the material catalogue has been reviewed and additionally recyclate percentages also as renewable content values can be selected for most of the materials. Furthermore some questions have been changed. When displaying already sent old datasheets these deleted or changed questions are displayed, for new datasheets in edit mode these questions are invisible.

If a datasheet is edited which has been created before introducing the MACSI 2010 version, it may occur that the changing of the questions will not be saved correctly. In this case the material should be deleted and newly inserted to the datasheet. This is unfortunately necessary because a migration of old materials to new materials cannot be done automatically.

Add Substances / Change substancelist

If an existing material does not contain any substances or a material contains already some basic substances and the user wants to change the list of the associated substances this can be done by clicking the button "Add Substance /

Change substance list" A. The same list of basic substances as for the material selection screen (see above) appears however already existing substances will not be shown any more. By selecting of rows those substances are added to the specific material. The changes are done by clicking 'Validate'.

If existing substances of a material should be deleted the checkbox "Delete" has to be selected during editing the substance data and the material has to be saved afterwards.

(%) All Col. Vers. Delete
on No Color Code
3.0 🔽 🔽
code1

Figure 18: Delete a substance



4.5.3.2 Add Electronic part

📢 MACSI - Choose Material 🛛 🛛 🔀								
Electronic components addition								
	Name							
	1	Active components						
	2	batteries						
	3	Displayers						
	4	Integrated circuits						
	5	Microprocessors						
	6	Passive components						
	7	Printed circuits						
Apply								

Figure 19: Add electronic part

An electronic part can be selected from the list and added using the button "Apply". If multiple rows are selected (by Ctrl-Click or Ctrl-A for selection of all rows) all selected parts can be added to the MACSI MDS with one action.

If an electronic part was selected which already exists within the MACSI MDS then an error message will appear and the selection will be cancelled.

Introducing MACSI 2010 this function is no more available for new datasheets.

4.5.3.3 Add Noble Metal

The adding can be done analogue to the portal MACSI.

6	МА	CSI - Choose Material 🛛 🔀
	Nob	le metals addition
		Namo
	1	
	-	Dalladium
	2	Pallaulum
	3	Platinum
	4	Rhodium
	5	Silver
		Apply

Figure 20: Add Noble Material



If a noble material was selected which already exists within the MACSI MDS then an error message will appear and the selection will be cancelled.

Introducing MACSI 2010 this function is no more available for new datasheets.

4.5.3.4 Add Annex-II Exception

The adding of an Annex-II exemption can be done similar to the portal MACSI. All available exemptions are shown with their category and are available for selection.

MACSI - Choose Material						
xen	nptions	addition				
	Code	Chapter	Name			
1	16	Cadmium	Thick film pastes (1 July 2006)			
2	17	Cadmium	Batteries for electrical vehicles (after 31 December 2008, the placing on the market of M			
3	18	Cadmium	Optical components in glass matrixes used for Driver Assistance Systems (1.7.2007)			
4	10	Lead and lead compounds in components	Electrical components which contain lead in a glass or ceramic matrix compound except			
5	11	Lead and lead compounds in components	Pyrotechnic initiators for vehicles type- approved before 1 July 2006 and replacement i			
6	5	Lead and lead compounds in components	Batteries			
7	6	Lead and lead compounds in components	Vibration dampers			
8	7c	Lead and lead compounds in components	Bonding agents for elastomers in powertrain applications containing up to 0,5 % lead b			
9	8(2)	Lead and lead compounds in components	Solder in electronic circuit boards and other electric applications			
10	8a	Lead and lead compounds in components	Solder in electronic circuit boards and other electrical applications except on glass (31.1			
11	8b	Lead and lead compounds in components	Solder in electrical applications on glass (31.12.2010)			
12	1	Lead as an alloying element	Steel for machining purposes and galvanised steel containing up to 0,35 % lead by weig			
13	2c	Lead as an alloying element	Aluminium for machining purposes with a lead content up to 0,4 % by weight			
14	3	Lead as an alloying element	Copper alloy containing up to 4 % lead by weight			
15	4b	Lead as an alloying element	Bearing shells and bushes in engines, transmissions and air conditioning compressors (1			
16	15	Mercury	Discharge lamps and instrument panel displays			
			Apply			
	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	ACSI - Choo xetreptions Code 1 16 2 17 3 18 4 10 5 11 6 5 7 6 8 7 9 8(2) 10 8a 11 8b 12 1 13 2c 14 3 15 4b 15 15 15	ACSI - Choose Material xemptions addition 1 16 Cadmium 2 17 Cadmium 3 18 Cadmium 4 10 Lead and lead compounds in components 5 11 Lead and lead compounds in components 6 5 Lead and lead compounds in components 7 6 Lead and lead compounds in components 8 7 Lead and lead compounds in components 9 8(2) Lead and lead compounds in components 10 Ba Lead and lead compounds in components 11 8b Lead and lead compounds in components 12 1 Lead and lead compounds in components 13 8c Lead and lead compounds in components 14 3 Lead as an alloying element 13 2c Lead as an alloying element 14 3 Lead as an alloying element 15 4b Lead as an alloying element 16 15 Mercury			

Figure 21: Add Annex-II Exemption

An Annex-II exemption can be selected and applied using the button "Apply". Adding multiple exemptions is also possible as described above in Chapter 4.5.3.2.

If an exemption was selected which already exists within the MACSI MDS then an error message will appear and the selection will be cancelled.

4.5.4 MACSI Checker

The checker is providing following checks:

• Root

Following checks will be processed:

- Part number and
- o Part name and
- o PSA-Number and



- PSA-part number and
- Certificate must be accepted and
- Signature name and
- Signature first name and
- Signature function must not be empty
- o Materials must exist
- The total weight must be within the tolerance regarding the added weight of the materials. All entries which require weight information are totalized and checked against the total weight (+/- tolerance).
- The weight of the part has to be > 0
- The weight format is specified with "XXX.XXXX". For the weight only 3 digits before the decimal separtor and 4 digits after the separate are allowed. Does e.g the weight exceed 999 g, the weight unit has to be changed to kg and the weight has to be corrected accordingly.

Materials/Electronic Parts/Noble Metals/Exemptions

- $\circ~$ If the node is a MACSI material, a noble material or a corresponding Annex-II code, then the weight has to be > 0
- \circ If the node is an electronic part, then the amount has to be > 0.
- The selected exemption has to be valid.
- o Introducing MACSI 2010 no electronic parts or noble metals should be added to the tree (warning).
- The selected material has to be valid. If it is no more valid it has to be deleted from the tree.
- The weight format is specified with "XXX.XXXX". For the weight only 3 digits before the decimal separtor and 4 digits after the separate are allowed. Does e.g the weight exceed 999 g, the weight unit has to be changed to kg and the weight has to be corrected accordingly.
- The percentage for "Rate of filler/%" must be greater than 0 if "Type of filler" is not the default value. When for the material groups Thermoplastics, Elasotmers or Duromers a Type of filler is selected which is not "Unfilled" or "No charge" then the percentage value has to be > 0.

• Basic Substances

- The threshold must be > 0.
- The security measure must not be empty (introducing MACSI 2010).
- The colour version must not be empty if "All Colour versions" is not selected.
- The sum of the thresholds for one material must not exceed 100%.
- The selected basic substance has to be valid.
- Basic substances which are marked with "Only QAH" = "Yes" must only be selected when the part is marked as interior part.

However, because the part can be an interior part in the portal MACSI and the basic substance may be therefore correct this message will be displayed standard as warning, customer specific adaption may display it as error.





4.6 Transfer to the MACSI System

If a MACSI MDB was transferred into the portal, the status of the process can be checked here.

The history of the processed transfers are available in the menu "upload information" (

IMDS Uploads IMDS Upload Results HONDA Uploads MACSI Uploads	
	٦
Input	
Part-Name: PSA-Part-Name: PSA-Part-Number:	
State: All Y PSA-No.:	
Search Reset Info: 0 No data found!	
Data	1
PSA-No Part number Part name PSA part number PSA part name State Upload date Upload user Creation Date Upl. s	ta
	Ч
Load Export	

Figure 22: MACSI upload history

The screen is divided into three areas:

- Search criteria (red area)
- Search result list (green area)
- Actions (blue area)

4.6.1 Search criteria

Following search criteria are available:

- Part number Number of the MACSI MDS The entry will be expanded with a "*" at the end automatically.
- Part name
 The name of the MACSI MDS.
 The entry will be expanded with a "*" at the end automatically. The search is not case sensitive.
- PSA part name The PSA name which was entered for the MACSI MDS



- PSA part number
 - The PSA part number which was given to the MACSI MDS
- PSA-No
 - The PSA number of the MACSI MDS
- State

The state can be selected from a list.

Details about the status are described in chapter 4.1 "Status of MACSI MDS" starting on page 7.

After entering the search criteria the search can be started by pressing the ,search' button. By choosing the ,reset' button all search criteria will set back to the origin.

4.6.2 Search result list

The search result list will show all found MACSI MDS.

The table contains following information:

- PSA-No The PSA number of the MACSI MDS
- Part number
 Number of the datasheet
- Part name
- The name of the datasheet
- PSA part number The PSA part number which was given to the MACSI MDS
- PSA part name The PSA name which was entered for the MACSI MDS
- State
 - The current state of the MACSI MDS.

Details about the status are described in chapter 4.1 "Status of MACSI MDS" starting on page 7.

- Upl. Date
 - Date of the upload
- Upl. User
 - Name of the user who has invoked the upload
- Creation date date, the MACSI MDS was created
- Upl. State
 - The current state of the upload (if active)
 - Mission started
 - The process is running
 - Export active
 - The MACSI data will be prepared
 - Export finished The MACSI data are prepared
 - Upload active The MACSI MDS is uploading
 - Upload finished
 The upload of the MACSI
 - The upload of the MACSI MDS is finished
 - Upload failure
 - The upload of the MACSI MDS has failed
 - Export failure The preparation of the MACSI MDS has failed



- Result state
 - State of the process when finished
 - o Successful
 - o Failure
- Result message
 - Result of the upload to the MACSI portal.

To get the complete text, move the mouse to the column. The complete text will then be shown in the tooltip.

Certainly the text can be copied to the clipboard using the right mouse button.

• Result date Date, when the result was received.

4.6.3 Actions

Following actions are available

- Load
 - The selected MACSI MDS will be opened
- Export
 - The actual search result list can be exported as CSV or XLS file



5 Translation table IMDS to MACSI Materials

5.1 General

When creating a MACSI MDS from an IMDS MDS, all materials will be transferred.

As the MACSI portal has its own material classifications, a translation from IMDS to MACSI must be done. To minimize the effort for this translation, iMDS/IHS will "notice" the translation done by a user together with all needed information.

When translating the identical material again from IMDS to MACSI, iPCA/IHS will use the noticed information for an automated translation so that no interaction is required.

This "notice" will be done using the substitution management.

Common information about the substitution management can be found in the manuals for the option Flatbill.

5.2 Substitution Management for MACSI Materials

The substitution management can be opend from the menu using "extras \rightarrow substitution management". The tab "MACSI" contains all MACSI relevant information.

🔐 Substitution-Management										
Material name:					Show	v inactive?				
IMDS material name:			IMDS	material versi	ion:					- II
			11100	nateriar versi						
	Search	Reset		Inf	ō: 24 rows fo	ound!				
Data										
Imds name	Imds version	Macsi name	Answer 1	Answer 2	Answer 3	Answer 4	Answer 5	Answer 6	Answer '	
1 meinLeder	441884 / 1	Leather								^
2 Waschmittel	491451 / 1	Others								
3 newNode_39161 / Kleb		Ceramics								
4 Wood	•	Bitumen								
5 Hostalen-eigen	443865 / 1	Bitumen								=
6 NICr20AlY-ENIPNT / Ni	542050 / 1	Nickel and a								
7 Kunstoff1	430044 / 1	Nickel and a								
8 electroplated Zinc	447891 / 1	Others								
9 electroplated Zinc	107183 / 1	ZAMACK (Zn								-
10 C 7351 P	433987 / 1	Bronze								
11 C 6783 BE	433971 / 1	Brass								
12 3CD28B	431248 / 1	Lamellar gr								
13 100Cr6	16368 / 1	Forged steel								
14 My metal / Mein Metall		Stainless	Aluminized							~
			E	xport						

Figure 23: Substitution Management

Having the needed access rights, unwanted rules can be deactivated.

Introducing MACSI 2010 new/changed questions for specifying a material exist above all for elastomers. So it is recommended to check the substitution table for MACSI materials if the mapping conforms to the new material



catalogue. Above all the elastomers should be checked and set inactive if necessary so that the mapping could be done newly.

6 User management

For information about the user management and the necessary rights to work with the option "MACSI" please refer to the documentation for the user management.



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8 Change History

Version	Date	Description
4.02.002	2006/07/28	Creation
5.1	2007/05/31	Layout adapted to new CI
6.0	2008/10/20	Minor changes for Release 6.0
6.1	2009/02/03	Changes for Macsi plus
6.2	2009/03/31	Additional input fields, substances "Only QAH", change of the
		tolerance value
7.05	2010/01/13	Minor changes for Macsi Checker
7.11/7.08.005	2010/04/23	Changes for Macsi 2010
7.17/7.08.008	2010/08/31	Added checks for invalid materials and colour codes; minor changes
		for interior parts
8.01.006	2011/08/31	New checks for weight format and percentages for material
		questions (chapter 4.5.4)