

Table of Contents

I. General acceptance criteria	3
1. Acceptance criteria for the MDS ID	3
1.1. New MDS ID	3
1.2. Changes to existing MDS	4
1.3. Same MDS ID for RAPA Automotive GmbH & Co. KG and Rausch und Pausch L.P.....	4
2. Acceptance criteria component level General Information	4
2.1. Component and semi-component names	4
2.2. Excel list with English / German component- and semi-components names	4
2.3. Part/item number	4
2.4. Part/item number for assemblies	4
2.5. The word "Copy"	5
2.6. Preliminary MDS check box.....	5
2.7. Weight indication measured weight	5
3. Acceptance criteria for "material" in general	5
3.1. Material names and remarks.....	5
3.2. Disclaimer.....	5
3.3. Unnecessary material levels	5
3.4. Declarable and prohibited basic substances.....	5
3.5. For basic substances please note.....	5
3.6. Requirements of our customers (tier 1 / OEM).....	5
3.7. Display of Warnings and Errors	6
3.8. Process chemical in final state.....	6
3.9. Remaining basic substances	6
3.10. Basic substances with new indicators.....	6
3.11. Joker/Wildcard	6
3.12. Change in the recipe of the material	6
3.13. Chemistry manager.....	6
3.14. Current application codes	6
4. Acceptance criteria for information in the "Information Recipient Status"	7
4.1. Legacy spare part	7
4.2. Forwarding allowed.....	7
4.3. RAPA drawing data.....	7
4.4. Send and Propose button	7
4.5. Send and accept MDS period	7
5. Acceptance criteria for legal requirements	7
5.1. Regulation (EC) No 1907/2006 REACH-VO	7
5.2. GADSL (Global Automotive Declarable Substance List).....	8
5.3. Biocides	8
5.4. Directive 2011/65/EU (RoHS II) + delegated Directive (EU) 2015/863 (RoHS III)	8
5.5. Directive 2000/53/EC on end-of life vehicles	8
5.6. California P65	8
5.7. SCIP database.....	9
5.8. TSCA (Toxic Substances Control Act).....	9
II. Acceptance criteria for materials	9
1. Plastics, elastomers and thermoplastic elastomers	9
1.1. Material name	9
1.2. Standard symbol.....	9
1.3. Trade name.....	9
1.4. Symbol.....	9
1.5. Norms/Standards	9
1.6. Colour Masterbatch.....	10
1.7. Polymer materials marked	10
1.8. Recyclate information	10
1.9. Combination of plastics and metal components.....	10
1.10. Flame retardants and plasticizers	10
1.11. PFOA (perfluorooctanoic acid).....	11

Table of Contents

2. Acceptance criteria for electrical/electronic components and assemblies	11
2.1. Declaration according to IMDS 001	11
2.2. Reference different suppliers for the same component.....	11
2.3. Previous IMDS Recommendation IMDS 019 and associated materials disabled	11
2.4. Classification and Application Codes for electrical/electronic components and assemblies	11
2.5. Classification 8.1 Electronics (PCB, display) and 8.2 Electrics disabled.....	11
2.6. Material name for solder resist.....	11
2.7. Material name of metallic alloy.....	11
2.8. Laminate copper	11
2.9. Component with lead in glass	11
2.10. Create electronic component as component.....	12
2.11. Name and part/item number of the component.....	12
2.12. Mechanical component	12
2.13. Indication of number of identical components	12
2.14. Components with high-melting lead solder according to exception 8e.....	12
2.15. PFOA (perfluorooctanoic acid).....	12
3. Metals of all kinds	12
3.1. Standard materials from IMDS Steering Committee	12
3.2. Process materials in standard materials from IMDS Steering Committee.....	12
3.3. Standard materials in the lists of IMDS Steering Committee not available	12
3.4. Modified standard materials	12
3.5. Material name	12
3.6. Coatings of metal materials	13
3.7. Assembled components.....	13
3.8. Trade name.....	13
3.9. Recyclate	13
3.10. Application ID.....	13
4. Label Acceptance Criteria.....	14
4.1. Printed labels	14
4.2. Published Material Ink	14
4.3. Classifications in IMDS	15
III. Terms / abbreviations	16

I. General acceptance criteria

The creation of a material data sheet (hereinafter referred to as MDS) is according to the **IMDS general rules and guidelines IMDS 001** (hereinafter referred to as IMDS 001) with the **Annex IMDS 001a** (hereinafter referred to as IMDS 001a).

You can find the **IMDS 001** and **Annex IMDS 001a** in the **International Material Data System** of the automotive industry (hereinafter referred to as IMDS), under Help → Recommendation (Figure 1).

In order to be able to create the MDS correctly, it is recommended that the IMDS officer has attended at least a basic course for creation an MDS.

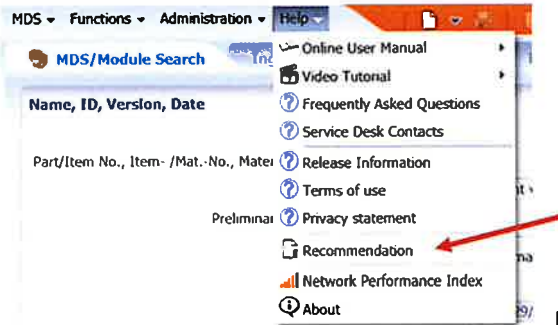


Fig.1

The worldwide references to standards, regulations, laws and any requirements of our customer must be observed. These include:

- the Regulation (EC) No 1907/2006 REACH-VO, (hereinafter referred to as REACH-VO)
- the Directive 2000/53/EC on end-of life vehicles,
- the Directive 2011/65/EU (RoHS II) + delegated Directive (EU) 2015/863 (RoHS III), (hereinafter referred to as RoHS)
- specific customer requirements, e.g. from OEM Daimler the DBL8585 or at JLR the STJLR99.9999 Restricted Substance Management Standard to consider.

Only the valid current versions of all worldwide regulations, requirements and specific customer requirements may be used.

Some addresses are under the heading **Terms / Abbreviations** on **page 16** of these requirements.

The following notes and requirements have developed from the reasons for our customers' rejection and in order to obtain a uniform spelling. It is necessary to observe these requirements, otherwise the MDS will be rejected.

Components and Materials that remain in the vehicle:

- An MDS only contains parts and materials that remain in the vehicle, e.g. without transport protection, etc.

MDS for sampling / index change of serial components:

- An MDS only has to be created for the sampling / index change of the serial component. Unless it is otherwise agreed with RAPA.
- A separate MDS must be created for the same series component in different versions will.

The MDS is to be sent to the company ID where the sampling takes place:

- RAPA Automotive GmbH & Co. KG has the **company ID: 3722**.
- Rausch und Pausch L.P. has the **company ID: 136353**.

1. Acceptance criteria for the MDS ID

1.1. New MDS ID (Figure 2):

- **Only for** new component with new part number
- **Only for** new semi-component MDS,
- **Only for** new material MDS

See also from page 25 Version 13.2 User Manual. (to find after logged under Help → User Guide)



Fig.2

1.2. Changes to existing MDS:

When changing the existing components, semi-component MDS and material MDS, only the version of the existing MDS-ID can be increased (Figure 3). **See also page 4 item 3.2.2 in the IMDS 001**



Fig.3

1.3. Same MDS ID for RAPA Automotive GmbH & Co. KG and Rausch und Pausch L.P.:

- If an MDS has to be submitted to RAPA Automotive GmbH & Co. KG and Rausch und Pausch L.P., the MDS with the same MDS ID should preferably be used.
- The RAPA component and drawing data must be adapted to the location.
- Already existing serial components with different MDS-ID are excluded.
- The same MDS-ID is possible because there are two independent companies.

2. Acceptance criteria component level General Information

2.1. Component and semi-component names:

- The component- and semi-component name must clearly describe the component and semi-component, e.g. pin must stand for a connector pin
- The **component- and semi-component name** must be in **English / German**.
- The two languages are to be separated by a **slash "/"**.
- **Space must be** inserted before and after the **slash "/"**.
- The first letter of the component and semi-component name in English must be capitalized.
- For O-rings, the dimensions according to the RAPA drawing must be entered in the component name, e.g. O-ring seal 3.5x1.5 / O-ring 3.5x1.5.

2.2. Excel list with English / German component- and semi-components names:

- The Excel list can be downloaded from the homepage: www.rapa.com/downloads.
- In column A, the German component- and semi-components names are listed alphabetically.
- From column C is the associated component- and semi-components name in English / German (copy & paste) to copy in the MDS.
- In the case of missing component- and semi-components names in English / German, please contact RAPA at imds@rapa.com.

2.3. Part/item number:

- In Information Recipient data → Details → Transfer Information → part/item number, the part/item number of the RAPA drawing should be used.
- This also applies to individual parts in assemblies and catalog goods.
- If the supplier requires his own part/item number, this must be added after the part/item number from the RAPA drawing.
- The RAPA part/item number and the supplier part/item number must be separated from each other by a slash "/". A space must be inserted before and after the slash "/".

2.4. Part/item number for assemblies:

- In an assembly part/item number from the RAPA drawing may not be used twice.
- The respective RAPA individual part/item number from the RAPA drawing must be used for individual parts of the assembly.
- If RAPA has not specified an individual part/item number in the assembly, a minus "-" can be put in for the part/item number or the supplier may use his own part/item number.
- This supplier own parts/item number must differ from the typical RAPA 8-digit parts/item number

2.5. The word "Copy":

- The word "Copy" appears when copy an existing MDS/Module to create a MDS/Module with new ID
- The word "Copy" must remove from all name fields (component name, semi-component name and material name).

2.6. "Preliminary MDS" check box:

- In the check box "Preliminary MDS" Preliminary MDS **no** tick may be set. See part → Details → general information

2.7. Weight indication measured weight:

- The actual weight of the finished component must be used for the measured weight.
- If the weight is less than 1kg, the unit is grams and if the weight is more than 1kg, the unit is kilograms.

3. Acceptance criteria for "material" in general

3.1. Material names and remarks:

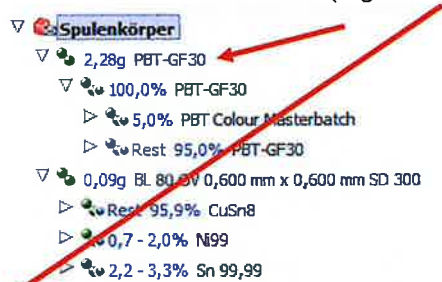
- Material names and remarks are to be written in English.

3.2. Disclaimer:

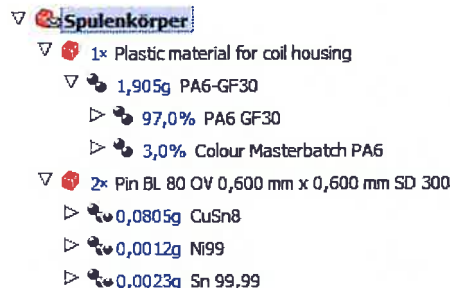
- No disclaimers may be entered in the remarks, only material-related data
Disclaimers are, for example, "lawyer clauses" or the note - the MDS is created with IMDS transmitted.

3.3. Unnecessary material levels:

- **Unnecessary material levels** (e.g. see Daimler supplier information on MDS testing in IMDS) should be avoided (Figures 4 and 5).



Not correct (Fig. 4)



Correct (Fig.5)

3.4. Declarable and prohibited basic substances:

- Declarable and prohibited basic substances must always be disclosed and reported.
See IMDS 001 page 19 item 4.5

3.5. For basic substances please note:

- Basic substances must comply with the current global legal requirements (see point 5 e.g. REACH-VO).
- In the event of changes in legal and other requirements, the MDS sent to RAPA must be checked again and updated.
- Legal changes, e.g. to REACH-VO Art.33 Para.1 are communicated via newsletter or via IMDS News.

3.6. Requirements of our customers (tier 1 / OEM):

- **Requirements that RAPA makes available to suppliers must be taken into account when creating the MDS.**
- The supplier information of the OEM is also on the public page of IMDS: www.public.mdsystem.com under Help/OEM Information.
- Non-observance leads to a rejection by our customers or the OEM and thus to additional effort for RAPA and the supplier.

3.7. Display of Warnings and Errors:

- When checking the MDS, **no warnings and errors may be displayed**, otherwise RAPA will reject the MDS without prior consultation. The consultation is to be made at imds@rapa.com.

3.8. Process chemical in final state:

- The material is to be reported in its final state
- In the final state, no process chemicals may appear in the MDS.
- If a process chemical is present in its final state, the **“Chemical presence type”** should be used as follows (Table 1, Figure 6).

Portion	Chemical presence type:
> 0.1%	Intended use
≤ 0.1%	Reaction residue or Impurity

Table 1

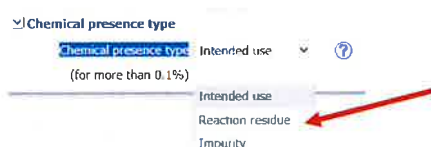


Fig. 6

3.9. Remaining basic substances:

- All basic substances (including basic substances that do not have to be declared) that remain in the component must be listed in the MDS. Only component that are mounted e.g. as transport protection etc. may not appear in the MDS.
- A separate MDS must be created for transport protection, etc. This is used to monitor compliance with legal requirements, e.g. REACH-VO.

3.10. Basic substances with new indicators:

- Basic substances with new indicators, for example in the GADSL and/or the REACH SVHC candidate list, are subject to declaration and/or prohibited.
- RAPA must **be informed of this immediately** at imds@rapa.com. The MDS must be updated immediately and sent to the relevant RAPA Company ID.

3.11. Joker/Wildcard:

- Avoid hiding a basic substance with a joker/wildcard and only use the marking **“confidential basic substance”**.
- Advantage of hiding as "confidential basic substance": If a basic substance will subject to declaration/ prohibited, the font changes from black to **blue for subject to declaration** or **red for forbidden**.

3.12. Change in the recipe of the material:

- Changing the recipe of the material (change of basic substance) for series components is not permitted. Any necessary changes to the recipe must be reported to RAPA immediately beforehand at imds@rapa.com with documentation (e.g. previous substances, substitute substances with CAS-no. etc.).**

3.13. Chemistry Manager:

- In order for requests for regulatory information on biocides (Biocide product Regulation BPR) and REACH Appendix XIV can be answered, the Chemistry Manager tool must be activated. See page 134 in the user manual IMDS Release 13.2.**

3.14. Current application codes:

- The current application code must always be used. If the application code changes for existing component, the MDS with the updated application code must be sent without being asked.** E.g. change of application codes 1 (alloying element in steel for machining purposes or galvanized steel) in 1a, as well as 2 (alloying element in aluminum for machining purposes) in 2(a)(b),(c)(i) and 2(c)(ii).

4. Acceptance criteria for information in the "Information Recipient Status"

4.1. Legacy Spare Part:

- The "Legacy Spare Part" check box must Legacy Spare Part **not be** ticked. See information recipient status → Details → Transfer information.

4.2. Forwarding allowed:

- A tick must set in check box for "Forwarding allowed". Forwarding allowed See Recipient Status Information → Details → Transfer Information.

4.3. RAPA drawing data:

- An MDS is to be sent with the current RAPA drawing data.
- In the information Recipient status-> Details-> Drawing, the drawing data are to be entered as follows. See following example for language English: Attention! Please note the remarks in the table 2.

Field:	Example for RAPA drawing data:	Remarks:
Drawing-No.:	according to RAPA drawing	
Drawing dated:	01 / 16.07.2022	The Index / Date of the RAPA drawing must entered in the field "Drawing dated":
Drawing change level:	C100869-22	The Revision of the RAPA drawing must entered in the field "Drawing change level":

Table 2:

- Index with date, without revision of RAPA drawing: In the field **Drawing dated**, use the index and the date of index for the date in the MDS and put a minus "-" in the field **Drawing change level**.
- Index, without date, without revision of RAPA drawing: In the field **Drawing dated**, use the index and the release date of the drawing for the date in the MDS and put a minus "-" in the field **Drawing change level**.

4.4. Send and Propose button:

- If an MDS will send to one recipient, use the "Send" button.
- If an MDS will send to more than one recipient, the "Propose" button applies.
- The "Send" button is hidden because this function only applies if only one recipient is listed.

4.5. Send and accept MDS period:

- An MDS must be entered in IMDS at least 2 weeks before the sampling date and accepted by the customer.

5. Acceptance criteria for legal requirements

5.1. Regulation (EC) No 1907/2006 REACH-VO:

5.1.1. The use of SVHC substances from the candidate list (list of substances of very high concern for approval) of the REACH-VO is to be avoided for materials, semi-finished products and components that are to be sampled. If SVHC substances are included in the candidate list of the REACH-VO during the sampling phase or in the case of series delivery, this must be reported immediately in writing to RAPA at imds@rapa.com together with information on the substance, according to Art.33 Para.1 of the REACH-VO.

5.1.2. The use of substances from Annex XIV (list of substances subject to authorization) of the REACH-VO is not permitted for the manufacturing process and in new materials, semi-finished products and components to be sampled. If a substance is included in Annex XIV of the REACH Regulation during the sampling phase or in the case of series delivery, this must be reported to RAPA in writing immediately at imds@rapa.com with information on the substance.

5.1.3. The use of substances from Annex XVII (list of substances with restrictions) of the REACH-VO for new parts and materials to be sampled must be reported to RAPA in writing at imds@rapa.com with information on the substance.

5.2. GADSL (Global Automotive Declarable Substance List):

5.2.1. All substances listed in the GADSL must be reported via the IMDS.

5.2.2. Substances listed in the Classification column with “P for Prohibited” are marked must not be contained in parts and semi-finished products if the weight percentage specified for the intended use is exceeded in a homogeneous material. The references to other global legal regulations and guidelines in the GADSL must be observed and their limit values observed. Deviations are to be reported to RAPA immediately at imds@rapa.com.

5.3. Biocides:

5.3.1. In general, substances may not be used as biocides, such as zinc oxide, silver, thiram, copper, etc. If the Chemistry Manager is not activated in IMDS, this is RAPA for new materials to be sampled and on request for existing materials, semi-finished products and components imds@rapa.com, indicating actual use in the affected material to be confirmed in writing.

5.4. Directive 2011/65/EU (RoHS II) + delegated Directive (EU) 2015/863 (RoHS III):

5.4.1. If parts are not only used in the automotive sector but also in the healthcare and industry sectors, the Directive 2011/65/EU (RoHS II) and delegated Directive (EU) 2015/863 (RoHS III) with Annexes I to V, as well as the German national regulation ElektroStoffV with the current ban of **PBB**, **PBDE** and **4 phthalates mentioned** with more than 0.1% by weight in a homogeneous material from July 22, 2019 or in categories 8 and 9 from July 22, 2021.

- di-(2- ethylhexyl) phthalate (DEHP),
- dibutyl phthalate (DBP),
- butyl benzyl phthalates (BBP),
- Diisobutyl phthalate (DIPB)
- Current deviations and future possible deviations must be reported to RAPA immediately at imds@rapa.com.

5.5. Directive 2000/53/EC on end-of life vehicles:

5.5.1. In general, Annex II with the exceptions is of particular importance in Directive 2000/53/EC. For new materials, semi-finished products and components to be sampled, the period of validity of the exception and the time of the review by the EU Commission must be observed. If exceptions (e.g. exception 2c.i), reviewed in 2021) come into consideration, which will be reviewed by the EU Commission within the next 5 years, this must be reported immediately to imds@rapa.com.

5.6. California P65:

- Is a California law of 1986 (Safe Drinking Water other toxic Enforcement).
- The state has published a list of chemicals known to cause cancer or birth defects or other reproductive harm (similar to REACH)
- Limit values have been set for some of these substances.
- Businesses must inform California citizens about these types of chemicals with an on-product warning of possible exposure.
- The substances of the California P65 were included in the IMDS as a pure substance group in February 2019.
- All substances in the list of chemicals must be declared and the limit values must be observed.
- The list (Excel) is available from OEHHHA (Office of Environmental Health Hazard Assessment) at the link: Source: <https://oehha.ca.gov/proposition-65/proposition-65-list> to find.

5.7. SCIP database:

- With the amendment of the European Waste Directive 2008/98/EC, a SCIP database (SCIP is abbreviation for **S**ubstance **C**oncern **I**n **P**roducts), in which articles with substances from the REACH SVHC candidate list >0.1% by weight must be entered.
- The implementation of the amendment into German law was completed in the ChemG with §16 f.
- The articles must be registered from 05.01.2021 (legal obligation).
- According to the O5A principle, the substance from the REACH candidate list refers to the smallest article traded, e.g. a ceramic body of a resistor.
- It affects all items manufactured, imported and distributed in the EU
- The SCIP number can be transferred directly from IMDS to the SCIP database using the S2S key (must be requested from ECHA).
- Outside of IMDS, the SCIP number with the part number should be sent to imds@rapa.com.
- The information from the database is then made available to waste operators, recyclers and consumers.

5.8. TSCA (Toxic Substances Control Act):

- Products supplied must comply with all applicable EPA (US Environmental Protection Agency) Toxic Substances Control Act rules and regulations.
- To be found with the link: [TSCA Chemical Substance Inventory | US EPA](#)

II. Acceptance criteria for materials

1. Plastics, elastomers and thermoplastic elastomers:

1.1. Material name:

- The complete standard symbol as in the field symbol should preferably be used in the material name, e.g. for filled thermoplastics **PA6-GF30** or for elastomer **EPDM**.
- **No trade names may be used in the material name text field**, like Ultradur B4300 G6 for thermoplastics or AP300 for elastomers.

1.2. Standard symbol:

- Standard symbol are to be written in capital letters. Chemical symbols are not affected.

1.3. Trade name:

- If the trade name for thermoplastics, e.g. Ultramid B3WG6, is specified in the drawing, this is completely to enter in the text field "Trade Name".
- In the case of elastomers, the material designation of the supplier or the worldwide trade name must be entered in the "Trade name" text field.

1.4. Symbol:

- For plastics of all kinds, the complete standard symbol with fillers such as GF30 must always be present in the "Symbol" field.
- The standard symbol must correspond to a public norms/standard.

1.5. Norms/Standards:

- In "Norms/Standards", public norms are to be specified, regardless of the weight - see table 3.

Classification	Norms/Standards
5.1a filled thermoplastics	ISO 1043
5.1.b unfilled thermoplastics	ISO 1043
5.2 Thermoplastic Elastomers	ISO 18064
5.3 Elastomers / Elastomeric Compounds	ISO 1629
5.5.2 Polymer fibers	ISO 2076

Table 3

1.6. Colour Masterbatch:

- If a **colour masterbatch** is used in addition to the plastic, the tree structure, as shown in Figure 7 of **IMDS 001 page 26** to use.
- **RAPA and our customers reject other execution methods!**

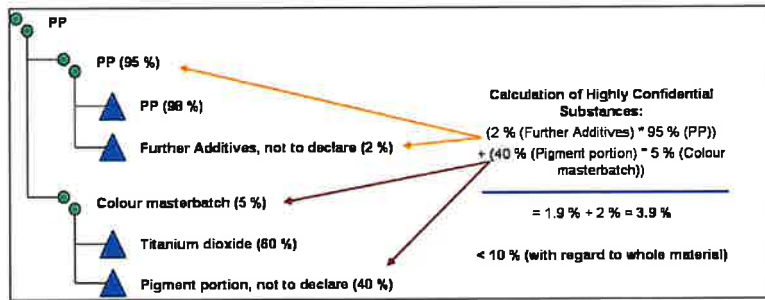


Fig. 7

1.7. Polymer materials marked:

- For components with classification 5.x and 6.x, the question "Marked polymer materials" arises. This must always be answered for all components, regardless of weight (Figure 8).
- Depending on the percentage by weight of the plastic in the component, it is either "**Not applicable (no statutory marking required)**" or "**Yes (marked according to statutory requirements)**" select Specifications [see help ?](#) on this point.

Example of polymeric part marking:

Parts Marking

Polymeric part(s) marked Not Applicable (Parts do not require marking due to specifications of weight, geometric restriction or surface requirements.)



Fig. 8

- If components are marked with >PA6 GF30< according to the RAPA drawing or if components are marked later (e.g. during final assembly), the question must always be answered with "**Yes (marked according to legal regulations)**" regardless of the weight.

1.8. Recyclate information:

- The use of recyclate in plastics is generally not permitted and the question "**Does the material contain recyclate?**" to answer with **No**.
- If, unexpectedly, recyclate is used, the question "**Does the material contain recyclate?**" must be answered with **yes** and the proportion of production waste and/or used materials must be stated.
- The range of recyclate must not be more than 20%. The statement 5-30%, for example, is not correct. The maximum would be e.g. 5-25%.
- **RAPA must be informed in writing before use of the recyclate at imds@rapa.com and the approval of the development departments must be obtained, otherwise the MDS will be rejected by RAPA.**

1.9. Combination of plastics and metal components:

- If metal component are injected into a plastic component or metal component are overmoulded with plastic, the plastic and the metal component must be listed individually as child component nodes and described clearly. See figure 9 example plug assembly / Stecker kpl.:

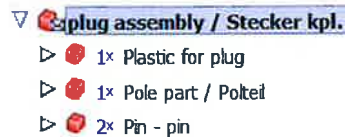


Fig. 9

1.10. Flame retardants and plasticizers:

- **Attention!** Flame retardants and/or plasticizers that do not meet legal and customer-specific requirements or that may be banned by law in the next few years must not be used.
- **The use of flame retardants and/or plasticizers is previously RAPA at imds@rapa.com and obtain the approval of the develop department.**

1.11. PFOA (perfluorooctanoic acid):

- PFOA (perfluorooctanoic acid) and its compounds may generally not be used.

2. Acceptance criteria for electrical/electronic components and assemblies

2.1. Declaration according to IMDS 001:

- According to the judgment of the European Court of Justice of September 10, 2015, electronic components such as base materials, resistors, diodes, IC etc. according to the O5A principle (once an article, always an article) in accordance with **IMDS 001** to declare.
- Ceramic bodies that are purchased from the electronics manufacturer are not only to be listed, but also to be included in the MDS as child nodes.

2.2. Reference different suppliers for the same component:

- With IMDS Release 13.0 (May 2021) alternative MDSs for a component from different suppliers can be referenced.
- One of the alternatives is to be defined as the preferred alternative.
- If the supplier of a component changes, it is then no longer necessary to send a new MDS version.

2.3. Previous IMDS Recommendation IMDS 019 and associated materials disabled:

- The previous IMDS Recommendation 019 and associated materials, like PCB-Standard ZVEI Rec. 019 have been deactivated.
- In the case of new developments, the components must be declared individually with the materials actually used
- Existing MDSs are to be adapted and a new version sent.
- Mechanical parts such as wiring, screws etc. and the soldering of components must also be specified as separate parts according to IMDS 001.

2.4. Classification and Application Codes for electrical/electronic components and assemblies:

- Use the material classifications and Application Codes for electrical/electronic components and assemblies from the new **IMDS Recommendation 019 Electric/Electronic (E/E) components and assemblies** (hereinafter referred to as **new IMDS 019**) valid from September 2022.

2.5. Classification 8.1 Electronics (PCB, display) and 8.2 Electrics disabled:

- The previous classifications 8.1 Electronics (printed circuit board, display) and 8.2 Electrics are not permitted for new developments. In general, no changes are necessary for existing data.

2.6. Material name for solder resist:

- "Lacquer" should be used as the material name of the solder resist.
- "Solder mask" as a material name of solder resist is not permitted and is rejected by our customers.
- **No trade names may be used** for material names, like SOLDERNONPB

2.7. Material name of metallic alloy:

- In the case of metallic alloys, the designations and abbreviations must be used in the material name as in public standards, e.g. Cu90Zn5Sn - see also **IMDS 001 Section 4.4 Materials**.

2.8. Laminate Copper:

- The laminated copper should be reported in its full composition and not just displayed as 100% copper.
- For standard materials, preferably the materials are **Cu-ETP** or **Cu-OF** from the **IMDS Committee** to use.

2.9. Component with lead in glass:

- In the case of electronic components with lead in the glass, **item 2.6 of IMDS 001a** must be observed.
- The process chemical Diboron-trioxide CAS no. 1303-86-2 in ceramics and glass must not be listed in the final state.
- Our customers reject an MDS with Diboron-trioxide CAS no. 1303-86-2 in ceramics and glass and may not be used as a biocide.

2.10. Create electronic component as component:

- With electronic components, the top level must always be created as a component.
- Homogeneous materials in the component are to be executed individually as a material or semi-component or as a child component node.

2.11. Name and part/item number of the component:

- In the name field, is the name of component, and in the field part/item number, is the part/item number from the RAPA drawing. For example Resistor
- Use the Naming Conventions for electrical/electronic components and assemblies from the **new IMDS 019** valid from September 2022.

2.12. Mechanical component:

- In the case of mechanical components such as potentiometers, relays, etc., the individual parts must be designed as child part nodes and the homogeneous materials placed individually underneath.

2.13. Indication of number of identical components:

- Electronic components and mechanical components of the same type/size are to be represented only once and the total number is to be specified at the parent node or for the type.

2.14. Components with high-melting lead solder according to exception 8e:

- Electronic components and their solders should contain a maximum of 0.1% by weight of lead or lead compounds.
- If this is currently not possible for technical reasons in accordance with Directive 2000/53/EC Annex II, exception 8e, RAPA must be informed immediately in writing at imds@rapa.com with the relevant data sheets.
- Note that exception 8e will be reviewed in 2024.

2.15. PFOA (perfluorooctanoic acid):

- PFOA (perfluorooctanoic acid) and its compounds may generally not be used.

3. Metals of all kinds

3.1. Standard materials from IMDS Steering Committee:

- Standard materials of classifications 1-4 are preferably use from the currently published lists of the **IMDS Steering Committee** (IMDS Committee (ID 423); IMDS Committee /ILI Metals (ID 18986), Stahl und Eisen Liste (ID 313)).

3.2. Process materials in standard materials from IMDS Steering Committee:

- In the case of sampling/index changes, the standard materials must be checked for the process substances they contain (e.g. oxygen),
- If process substances have been removed in the new version or new ID, this version must be used.
- However, nothing may have changed with the other pure substances, otherwise the MDS from the last material sampling should continue to be used.

3.3. Standard materials in the lists of IMDS Steering Committee not available:

- With these standard materials, it must be ensured that the naming in the material name correspond to a public standard, e.g. X4CrNi18-12.
- If there is no public standard as a basis, the materials must be clearly described according to the specification, e.g. aluminum alloy or with standard symbol X4CrNi18-12
- It is the **material name in English**, e.g. **"Aluminum alloy"** to be used.

3.4. Modified standard materials:

- For materials of classifications 1-4, modified standard materials must contain the following information:
 - "mod." or "modified" as a supplement in the material name,
 - a clarification in the standard field such as "DIN 5512", "based on DIN 5512" or similar.

3.5. Material name:

- There must be no trade names in the field material name.

3.6. Coatings of metal materials:

- A coating as a homogeneous material must be specified separately as a material. This also applies, for example, to passivation, sealing or anodized layers.
- The material of the coating is to be put on the same level as the material of the metal itself.

3.7. Assembled components:

- If a product consists of several individual parts that are connected in some way, the individual components, for example nut and washer, are to be listed as individual parts (child part nodes).

3.8. Trade name:

- If the trade name is given in the drawing, it is completely in the text field "Trade Name" to enter. For example for surface protection.

3.9. Recyclate:

- In the case of recyclate, the range must not be more than 20%. The statement 75-100% is incorrect. The maximum would be e.g. 80-100%.

3.10. Application ID:

- Application ID for specific basic substances and their weight fractions are to be used as follows (table 4):

Substance	Weight percentage	Application ID
Lead	≤ 0.1%	Application ID 44 "Concentration within acceptable GADSL limits [44]"
cadmium	≤ 0.01%	Application ID 47 "Concentration within acceptable GADSL limits [47]" to use .
nickel	> 5%	Application ID 33 "Other application (Surface not routinely touched or nickel release rate < 0.5 µg/cm2/week) [33]"
nickel	≤ 5%	Application ID 34 "Not applicable [34]"

Table 4

- For e.g. the material of a high-alloy steel, you will find details in the Application section. The application ID must be entered there. In our example figure 10 for nickel with max. 9.5%.

Application	Basic Substance	% (MIN)	% (MAX)	Application [ID]
	Nickel	6	9.5	-

Fig. 10

Double-clicking in the field of the empty column under Application ID (Figure 10). The window with the selection of the application ID opens (Figure 11). In this case the Click Application ID 33 to gray it out. Then go to "Apply".

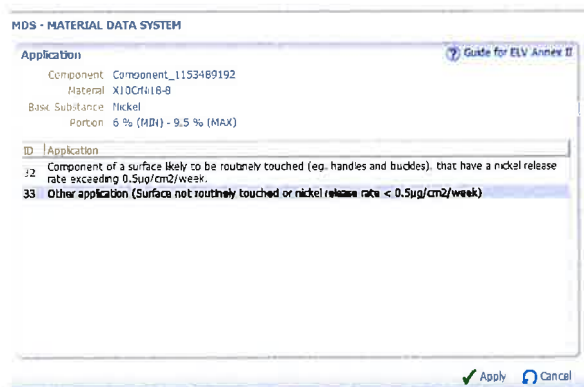


Fig 11

4. Label Acceptance Criteria

4.1. Printed labels:

- In the case of printed labels, the materials of the colors must also be specified.
- If the material composition of the different colors on the label is the same, the colors can be combined.
- The automotive industry expects that the colors used correspond to the semi-component published by the IMDS Committee.
- Examples:
Paper label ID 14085597
PE label ID 14085882
PET Label ID 14085118
PP label ID 14085749
- To be found with **semi-component search** → name ***Label (don't forget the asterisk)**, → find **published MDS** (company ID **423 for IMDS-Committee**).
- If there are no basic substances that must be declared, it must be checked whether the published semi-component can be used by the IMDS Committee.
- **If the colored material in the semi-component and/or the material, e.g. PE, PET or PP, cannot be used, RAPA must be informed immediately in writing at imds@rapa.com with the relevant data sheets.**

4.2. Published Material Ink:

- The material of the printing ink from the IMDS Committee can be found separately under published materials with ID 9448512. Enter the ID 9448512 in "**Material search**" and tick "**published MDS**".

4.3. Classifications in IMDS:

Klassifizierung

Klassifizierung	Beschreibung
0	undefiniert
1	Stahl und Eisenwerkstoffe
1.1	Stähle / Stahlguß / Sinterstahl
1.1.1	unlegiert, niedriglegiert
1.1.2	hochlegiert
1.2	Gußeisen
1.2.1	Gußeisen mit Lamellengraphit / Tempergußeisen
1.2.2	Gußeisen mit Kugelgraphit / Vermiculargraphit
1.2.3	Hochlegiertes Gußeisen
2	Leichtmetalle, Guß- und Knetlegierungen
2.1	Aluminium und Aluminiumlegierungen
2.1.1	Aluminium Gußlegierungen
2.1.2	Aluminium Knetlegierungen
2.2	Magnesium und Magnesiumlegierungen
2.2.1	Magnesium Gußlegierungen
2.2.2	Magnesium Knetlegierungen
2.3	Titan und Titanlegierungen
4.2	Sonstige Sondermetalle
5	Polymerwerkstoffe
5.1	Thermoplaste
5.1.a	gefüllte Thermoplaste
5.1.b	ungefüllte Thermoplaste
5.2	Thermoplastische Elastomere
5.3	Elastomere / elastomere Verbunde
5.4	Duromere
5.4.1	Polyurethan
5.4.2	ungesättigte Polyester
5.4.3	Sonstige Duromere
5.5	Polymere Verbunde (z.B. nicht trennbare kaschierte Verkleidungsteile)
5.5.1	Kunststoffe (im polymeren Verbund)
5.5.2	Textilien (im polymeren Verbund)
6	Prozeßpolymere
6.1	Lacke
6.2	Kleber, Dichtstoffe
6.3	Unterbodenschutz
7	Sonstige Werkstoffe und Werkstoffverbunde (Mischumfang)
7.1	Modifizierte organische Naturwerkstoffe (z.B. Leder, Holz, Pappe, Baumwo...
7.2	Keramik / Glas
7.3	Sonstige Verbunde (z.B. Reibbeläge)
8	Elektronik / Elektrik
8.1	Elektronik (z.B. Leiterplatten, Displays)
8.2	Elektrik
9	Betriebsstoffe und Hilfsmittel
9.1	Kraftstoffe
9.2	Schmierstoffe



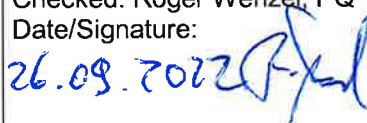

III. Terms / abbreviations:

- RAAP:** RAPA work instruction process
- MDS ID no.:** Identification number of the material data sheet
- GADSL:** Can be found at www.gadsl.org -> Open the GADSL Reference List Excel file -> Click on the Reference List table -> Activate editing -> on the number e.g. 4 at the top left

1	2	3	4	5
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- ECHA:** European Chemicals Agency
- REACH-SVHC:** Substance of Very High Concern, Candidate List of Substances of Very High Concern,
Link <https://echa.europa.eu/candidate-list-table>
- REACH Annex XIV:** Link <https://echa.europa.eu/de/authorisation-list>
- REACH Annex XVII:** Link <https://echa.europa.eu/de/substances-restricted-under-reach>
- ECHA assumes no liability for the lists being up-to-date
- EUR-Lex:** The European regulations and directives are find with the link [EU-Recht - EUR-Lex \(europa.eu\)](http://eu-recht.europa.eu), when searching with the document number, enter the year and the number with 4 digits each. (e.g. to Directive 2000/53/EG Year:2000 and Number:0053)

Change index

Status	Date	Name	Change
001	07/12/2018	Reiner Ackermann	New creation
002	05/12/2021	Reiner Ackermann	Revised according to the latest legal requirements
003	09/05/2022	Reiner Ackermann	Revised according to the latest legal requirements

Created: Reiner Ackermann, QM Date/Signature: 05.09.2022 	Checked: Carola Wirth, QM Date/Signature: 22.09.2022  Checked: Roger Wenzel, PQ Date/Signature: 26.09.2022 	Approval: Marvin Köppel, QM Date/Signature: 26.09.2022 
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