# **BMW** Group



# Guidance on Material Datasheet creation for the BMW Group in IMDS

# **1** Intention

This instruction shows the BMW specific requirements for the creation of preliminary and final material datasheets (MDS) within the International Material Data System (IMDS). It also gives advice on the correct structure of datasheets. Laws, guidelines and IMDS recommendations remain unaffected by these instructions.

# 2 General advices for creation of material data sheets

Material data sheets are compulsory to comply with legal requirements. The lack of accepted datasheets can e.g. endanger the approval of vehicles.

According to BMW terms and conditions for purchasing the supplier is obliged to submit material data sheets via IMDS.

Providing a material data sheet in IMDS there is no need to create a material data sheet as a paper based copy. Material data sheets have to be created for spare parts too.

# 2.1 Creating and Sending of material data sheets

Starting with the nomination of the supplier and not later than 8 month before SOP a preliminary (see point 2.6) or a final material data sheet has to be sent to BMW. Final material data sheets have to be sent to BMW between order and first sampling. If final data sheets are sent in an early period up to 8 month before SOP the creation of preliminary data sheets is no longer necessary.

# 2.2 Editing of material data sheets

The **MDS** has to be updated if weight and composition of the part change. An update of a MDS is not necessary if the ranges of the accepted datasheet are still met (see Recommendation 022).

If you have to edit a material data sheet without a change of the part number please **do not create a copy** with a new IMDS ID. Please use the **option "new version"** instead

There is no need to create a new data sheet if the **alteration index AI** of a part number increases **without a change of composition or weight**. Please use the IMDS ID and version of the already accepted material data sheet for the first sampling record of the new part. The new part number/AI will then be linked to IMDS ID/version you provided by the BMW IMDS Team.

### 2.3 Parts in different colours

Instead of creating MDSs for several colour versions, it is possible to **specify a representative MDS** for all colours. If the ingredients of the colour versions differ too much from each other (e.g. there are further declarable substances) and therefore cannot be covered by appropriate wildcards and tolerances, a separate MDS has to be created. Create the representative MDS for the part number, which is used for the first sampling or the all colour number. The ID/version of the representative MDS has to be entered in the first sampling record (see point 7). For the first sampling please give the part numbers for parts, which are covered by this representative MDS on the first sampling record. A list of the part numbers (and alteration index) with its representative mds (IMDS ID) has to be sent to IMDS Team (IMDS-Team@BMW.de).

### 2.4 Parts included in a scope of delivery

If several parts are subjected together to the first sampling as a scope of delivery, please create a MDS for the complete scope of delivery. Please give the ID and version of this MDS on the initial sampling report. If parts of a scope of delivery have BMW part numbers, additional MDS have to be made for these parts.

### 2.5 Multivariant parts (wire harness, seats)

The creation of material data sheets for multivariant parts can be minimised to representative material data sheets in coordination with the BMW IMDS Team.

| Name    | Dr. Karin Oldenburg-Nazaruk |
|---------|-----------------------------|
| Company | BMW Group                   |
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# 2.6 Preliminary material data sheets

The preliminary material data sheets have to be created according to Recommendation 023. The preliminary material data sheets have to be sent by the supplier without request.

Unlike final material data sheets the preliminary material data sheets can consist of incomplete materials where necessary. The requirements for the other data concerning correctness, completeness and bindingness are the same as for final material data sheets. Incomplete material data sheets have to be marked as 'development sample report'. This marked 'development sample report' does **not** mean that a development part, prototype, etc. is sampled. It means that the material data sheet for a part is sent in an early phase of development, but shows already the serious production status. There is no need to create a material data sheet for development parts, prototypes or samples! Prohibited and declarable substances according to GADSL / GS93008 have to be specified. If the material data sheets are created as preliminary ones and the exact data of materials is still missing, the ProtMat-materials of the IMDS-Committee should be used (Recommendation (023).

BMW prefers the creation of final material data sheets (see point 2.1).

Preliminary material data sheets cannot be used for the Initial Sample Inspection Report.

### 2.7 Handling of material data sheets

Sending a MDS to BMW the button "send" should be chosen instead of "propose".

Rejected mds should be edited and resubmitted as soon as possible.

Delete rejected MDS, which are not required anymore or to which there is already a newer accepted version. Accepted MDS will thereby not be affected.

# 2.8 Subcomponents with BMW part number

If there is a BMW part number for the subcomponent of an mds it should be given on tab "details".

# **3 Formal Requirements**

The following formal requirements must be fulfilled in order to guarantee the correct data exchange with BMW internal systems. The required data must be entered into the appropriate recipient specific fields when sending or proposing the MDS. All data should be extracted from the appropriate BMW order form (see figures with different examples of order forms in the annex of this document).

#### 3.1 **Description of parts**

Must be the same as the description on the BMW order form (see annex with order forms).

In the case of standard parts, the standard must be indicated behind the BMW name (except when the standard is already indicated in the BMW name).

The size of standard fasteners should be indicated

E.g. hexagon head screw ISO 4014-M12x50-8.8-ZNS3

For semi components add the weight per length, area or volume to the description

#### 3.2 Part/Item No.

The BMW part number consists of 7 digits. Additions to this number separated by a dot or slash must not be filled in IMDS. (Do not use blanks in between digits, see figure 1 and annex with order forms.) E.g. Part/Item No.: 1234567

#### 3.3 Drawing dated

The Alteration index (AI) given in the order form must be filled in here. (Please enter no date, see figure 1 and annex with order forms.)

E.g. Drawing dated: 09

#### Drawing change level "NAEL" (see also KM-Nr. in the order form) 3.4

Only the NAEL (New Release/Change List NRCL) is allowed in this field.

The NAEL is a combination of 6 alphanumeric characters. (See figure 1 and annex with order forms.) E.g. Drawing Change Level.: EKM62N

#### 3.5 Supplier code

The BMW supplier code has to be filled in the appropriate field. BMW supplier code consists of a 6 digits number followed by a dash and two more digits. Please fill in all 8 digits (including the dash), do not use blanks. (See figure 1 and annex with order forms.) Do not use the DUNS number.

E.g. Supplier Code.: 999999-10

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### **Company data**

Recip. Status: modified

| Recipient:<br>Company- / OrgID:<br>Part/Item No.: | BMW AG<br>103<br>1234567   |
|---|----------------------------|
| Description:                                      | ZB Beispielteil VL Facelii |
| Drawing No.:                                      | 1234500                    |
| Drawing dated:                                    | 09                         |
| Drawing Change Level:                             | ELV21S                     |
| Report No.:                                       |                            |
| Date of Report:                                   | (MM/DD/YYYY)               |
| Purchase Order No.:                               |                            |
| Bill of Delivery No.:                             |                            |
| Supplier Code:                                    | 999999-10                  |

Figure 1: Example for the entry of recipient data when sending a MDS to BMW

# 4 Usage of suitable materials

Please pay attention to the correct classification of the materials. For metallic materials give the material number according to standards. The usage of materials created by the IMDS Committee, Steel & Iron list and ILI is recommended.

Plastic materials without the declaration of additives will be rejected.

## **5** Concentrations of basic substances

Limits of legal restrictions for concentrations of basic substances and maximum sums for wild cards must not be exceeded. Therefore the maximum value is considered to be relevant for checking datasheets.

Deviations of concentrations and weights shall only display real variations. The tolerance range is therefore  $\pm$  5 %. If components (raw parts) lose weight in processes like drilling or milling they have to be created or requested as a semi component. A compensation of the loss in weight through an excessive tolerance range is not acceptable.

### **6 Recyclate information**

Information to content of recycled material in materials with classification 5.1, 5.1.a/b, 5.3, 5.4.1 and 5.5.2 with more than 25 g is compulsory.

# 7 Entry in the first sampling record

For the first sampling process the quality specialist needs the IMDS-ID and version of the **accepted** material data sheet. Please enter the number in the first sampling record according to the following example: 12345678/1. If the alteration index increases without change of weight or material composition you can use ID and version of the already accepted MDS (see point 2.2).

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# 8 MDS Request

Since IMDS Release 4.0 it is possible to request material data sheets from suppliers via IMDS. BMW will use this feature to demand the MDS which are still missing. Please pay attention to this menu item. With the function in menu item "settings" it is possible to get an email when your company receives a MDS Request. Therefore point "MDS Request received" has to be activated. Furthermore the supplier is still responsible for providing preliminary and final MDS for the first sampling process in due time and without request (see point 2.1).

The requests should be edited under menu point "MDS Request" (see IMDS user manual point 5.3 MDS Request). In that case an optimal tracking of request can be assured. Furthermore the recipient data, given by BMW, can be taken over.

# 9 Contact and further information

Point 19.7 of the purchasing conditions of the BMW Group deals with the suppliers responsibility to create material data sheets. The BMW purchasing conditions can be seen via b2b portal point "Department" – "Purchasing / direct material".

For questions concerning IMDS-datasheets please contact the BMW MDS-Division:

| Akif Cam<br>Ali Cam                                | Akif_Mehmet.Cam@partner.bmw.de<br>Ali.Cam@partner.bmw.de | +49 (0)89 382 - 58063<br>+49 (0)89 382 - 37564 |  |  |
|--|--|--|--|--|
| Christian Beschowetz                               | Christian.Beschowetz@partner.bmw.de                      | +49 (0)89 382 - 42561                          |  |  |
| Conrad Hirsemann                                   | Conrad.Hirsemann@partner.bmw.de                          | +49 (0)89 382 - 28072                          |  |  |
| René Johne   | Rene.Johne@partner.bmw.de                                | +49 (0)89 382 - 29488                          |  |  |
| Tobias Krammer                                     | Tobias.Krammer@partner.bmw.de                            | +49 (0)89 382 - 18671                          |  |  |
| Jürgen Kröller                                     | Juergen.Kroeller@partner.bmw.de                          | +49 (0)89 382 - 44871                          |  |  |
| Marcus Matthies                                    | Marcus.Matthies@partner.bmw.de                           | +49 (0)89 382 - 14346                          |  |  |
| Daniel Oeler                                       | Daniel.Oeler@partner.bmw.de                              | +49 (0)89 382 - 18213                          |  |  |
| Andreas Piessold                                   | Andreas.Piessold@partner.bmw.de                          | +49 (0)89 382 - 35206                          |  |  |
| Uta Posselt  | Uta.Posselt@partner.bmw.de                               | +49 (0)89 382 - 28072                          |  |  |
| Albert Siebler                                     | Albert.Siebler@partner.bmw.de                            | +49 (0)89 382 - 29488                          |  |  |
| Eleonore Steiler                                   | Eleonore.Steiler@partner.bmw.de                          | +49 (0)89 382 – 58592                          |  |  |
| Or use the general email address: IMDS-Team@bmw.de |  |  |  |  |
| Your BMW contact person is:                        |  |  |  |  |

Dr. Karin Oldenburg-Nazaruk Karin.Oldenburg@bmw.de +49 (0)89 382 46149

Notice:

For questions concerning datasheets please give your **IMDS-company-ID** when contacting the MDS-Division. This simplifies the process of finding your specific data in IMDS.

The BMW-company-ID in IMDS is: 103

IMDS Recommendations are available on the IMDS main menu after the log-on.

|  | BMW MANUFACTURING CORPORATION   | N                   |                          | 1                 | M PA      |
|--|---|---------------------|--------------------------|-------------------|-----------|
|  | Supplier code   |                     | (Order I                 | No.)              |           |
|  | BMW Manuta S Corp., P.O.Box 11000, Spartenburg, SC. 29  | BURCHASE            | ORDER                    | have always lines |           |
| Bupplier No                              | 999999-10   | _ ~~~               | dur dete                 | 7`654 3           | 21        |
|  | ABCDEFG-AUTOMOTIVE<br>ATT: CONTROLLER   |                     | 9/05/00<br>hendmens date | Amundment Ko.     |           |
|  |   |                     | literat                  | Department        |           |
|  | 246 MAIN STREET   | (864) 989-001       | 8944                     | TS-M-4            | Pege<br>2 |
|  | 00000 XY 00000<br>USA   | (864) 989-007       | BLONI                    | INGER             |           |
|  | Uan   | Correspondence Code |                          |                   |           |
| r  | Continuation of   | Model spalloution   |                          |                   |           |
|  | TECHNISCHE AENDERUNG NAEL NR. EKM62N  | E53 ISIR            | undry UN                 | Price par PU      |           |
| [  |   |                     |                          | USD               |           |
|  | SUPPLIERS ACCEPTANCE OF THE LATEST<br>AS DEFINED BY THE PART NUMBER AND                           | CHANGE INDEX O      | F                        |                   |           |
|  | THIS ORDER. IF THE APPROPRIATE BMW<br>SPECIFICATION AND/OR NORMS FOR THE                          | PART NUMBER         | 1                        |                   |           |
|  | AND A.I. LEVEL SHOWN ON THIS PURCH<br>NOT BEEN RECEIVED BY YOUR COMPANY                           |                     |                          |                   |           |
|  | TO YOU BY BMW MC/AG, PLEASE NOTIFY<br>BUYER WITHIN 48 HOURS AFTER RECEIP                          |                     | G                        |                   |           |
|  | PURCHASE ORDER.   |                     |                          |                   |           |
|  | ISIR PARTS AND OUTSIDE SHIPPING CONTAINERS TO BE<br>IDENTIFIED WITH THE BMW PROVIDED ISIR LABELS. |                     |                          |                   |           |
| UM-<br>Unit of Me                        | BATESVILLE WAREHOUSE<br>ISIR LOCATION ATTN.: ISIR DEPT.   |                     |                          |                   |           |
| 00-place<br>10-mm<br>11-kn5h<br>12-Koot  | BMW WAREHOUSE<br>1221 BATESVILLE ROAD   |                     |                          |                   |           |
| 13-m<br>16-Yord<br>22-cm <sup>2</sup>    | GREER, SC 2965  |                     |                          |                   |           |
| 24-dm*<br>26-Square<br>28-m*             |   |                     |                          |                   |           |
| 27-Square<br>35-Cantient<br>37-Cubic In  | SUPPLIER ASSUMES THE RESPONSIBILIT  | Y TO PREPARE T      | HE                       |                   |           |
| 38-Cubic A<br>39-ta*<br>40-ş<br>41-Qunce | Part No. Alteration index   | : (Al)              |                          |                   |           |
| 43-kp<br>46-101                          |   |                     |                          |                   |           |
| 504<br>51-AM Ping<br>52-Bilt, Pin        |   |                     |                          |                   |           |
| 53-AM Coa<br>34-SHK, Cu<br>\$6-AM Col    | KM-NO DI: EKM62N C  |                     |                          |                   |           |
| 56-Brit, Gal<br>30-nuhutwa<br>50-hours   | W VALID FF 08/31/00 TO 12/31/00   |                     |                          |                   |           |
| \$8-days<br>39-month<br>70-quarter       | Description NAFL (NRCL) Drawing index (DLor Zl)   |                     |                          |                   |           |
| 71-yeer<br>31-out<br>32-puir             | DELIVERY DATE<br>09/30/00   |                     |                          |                   |           |
| PUter<br>Price for Un<br>Lepar N         |   |                     |                          |                   |           |
| 2-per 10<br>3-per 10<br>3-per 100        | · · ·   |                     |                          |                   | ./.       |
|  |   |                     |                          |                   | <u></u>   |
|  |   |                     |                          |                   |           |

Order form 1 (official order) with BMW-specific data to be filled in when sending a MDS

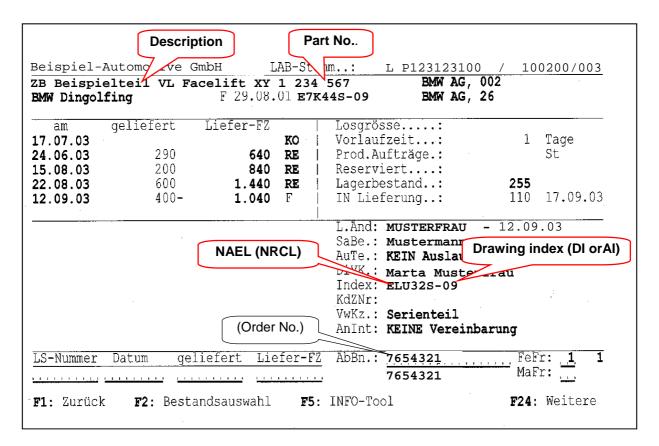
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| . 1   | BMW AG  |                             |           |                  |               |        |
|---|---|-----------------------------|-----------|------------------|---------------|--------|
|   | Lieferanten-Nr.<br>Bayerische Mg / 19768 AG. 807/88 München, Deutschland  |                             | (Best     | ellnum           | mer)          |        |
|   |   | BESTE                       |           | IG               | 7 654 3       |        |
| Listerantso-Nr.   |   |                             | Best Date |                  | Anderungs-Nr. | 21 .   |
|   | BEISPIEL-AUTOMOTIVE GMBH<br>-HERR BEISPIELMANN-   | · . · .                     | Anderung  | 98/03<br>s-Catum |               |        |
|   | HAUPTSTRASSE 15   | Telotax                     | 16        | nkaufer          | Abtellung     | i Sete |
|   | D-00000 NULLINGEN   | 089382-4475                 | 54 2      | 338              | EM-42         | 1      |
|   | · · · · · ·   | 089382-0123<br>Telefon      | 0         | ERR 1            | IUSTERMAN     | И      |
|   |   | 089382-0123<br>Thre Zeichen | 3.5 F     | RAU              | USTERFRA      | U I    |
|   | jang vom  | Anforderungsnummer          |           |                  | * +           |        |
| TI  | ECHNISCHE AENDERUNG NAEL NR. ELU32S   |                             | Menga     | ME               | Prois ja PE   | PE     |
|   |   | · · · ·                     |           |                  | EUR,          |        |
|   | ***** ERSTMUSTERBESTE   | LLUNG                       | ****      | *                |               |        |
| ME =<br>Maßeinheit<br>Q0-Stück<br>10-mm<br>11-loch<br>12-Feet<br>13-m<br>16-Yerd<br>22-ern <sup>4</sup><br>24-dm <sup>5</sup><br>23-Square inch<br>28-m <sup>2</sup><br>27-Square Foet<br>25-Square Foet<br>25-Square Foet<br>25-Square Foet<br>25-Square Foet<br>25-Square Foet<br>28-Cubic Isch<br>28-Cubic Isch<br>28-Cubic Isch | FUER DIESE BESTELLUNG GELTEN DIE NACHSTEHENDEN BE-<br>DINGUNGEN SOWIE DIE BMW EINKAUFSBEDINGUNGEN FUER<br>PRODUKTIONSMATERIAL UND KFZ - TEILE, BMW FERTIGUNGS-<br>MITTELBEDINGUNGEN, BMW VERSAND-, LIEFER- UND QUALI-<br>TAETSSICHERUNGSVORSCHRIFTEN, BMW ANFORDERUNGEN ZUR<br>UMWELTVERTRAEGLICHKEIT VON BMW PRODUKTEN, BMW AN-<br>FORDERUNGEN ZUR SOZIALVERANTWORTUNG, DAS BMW VER-<br>PACKUNGSHANDBUCH, JEWEILS IN DER AKTUELLEN FASSUNG,<br>DIE WIR IHNEN BEREITS UEBERSANDT HABEN ODER DIS SIE<br>IM INTERNET AUF DER BMW ZULIEFERER-HOMEPAGE UNTER<br>FOLGENDER ADRESSE EINSEHEN KOENNEN:<br>HTTPS://B2B.BMW.COM<br>WIR WEISEN DARAUF HIN, DASS VORGENANNTE STANDARD-<br>BEDINGUNGEN MIT GUELTIGKEIT AB DEM 23.05.2003 GE-<br>AENDERT WURDEN.<br>ETWA MIT IHNEN SCHRIFTLICH GETROFFENE ABWEICHENDE<br>ODER ZUSAETZLICHE BEDINGUNGEN GEHEN DEN VORGENANNTEN<br>STANDARDBEDINGUNGEN VOR.<br>DIE LIEFERUNG IST BESTIMMT SOWOHL FUER DIE FERTI- |                             |           |                  |               |        |
| 41-Unze<br>42-Pfund<br>43-kg<br>46-Tonne  | Sach-Nr. Änderungsindex   | (AI)                        |           |                  |               | -      |
| 50-1<br>51-AM Pint<br>52-Bric, Pine   |   | <br>                        | Ben er    | nung             | ſ             |        |
| 53-AM Coart 1<br>54-Brit: Cuart<br>55-AM Gallon<br>56-Brit: Gallon<br>66-Brit: Gallon<br>66-Sunden<br>68-Taga<br>68-Taga<br>68-Taga<br>68-Taga<br>68-Taga<br>69-Monet<br>70-Quartal<br>71-Jahr<br>91-Satz<br>92-Paar  | ZB BEISPIELTEIL VL FACELIFT XY  | U325 M                      |           |                  | dex: ZI)      |        |
| PE =<br>Preia-Einheit<br>1-ser 1<br>2-ser 10<br>3-ser 100<br>4-ser 1000   |   |                             |           |                  |               | /.     |

Order form 2 (German, official order) with BMW-specific data to be filled in when sending a MDS

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Order form 3 (German, remote data transmission order) with BMW-specific data to be filled in when sending a MDS

Remark

• The remote data transmission order does not contain all information of the official order form.

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