

Guidance on Material Datasheet creation for the BMW Group in IMDS

1. Intention

This document summarizes 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 material data sheets.

It complements legal requirements and IMDS Recommendations, which remain mandatory.

2. General advices for creation of material data sheets

Material data sheets are mandatory for meeting legal requirements and for the necessary documentation. The absence of accepted datasheets can for example endanger the type approval of vehicles.

According to BMW purchasing conditions the supplier is obliged to submit material data sheets via IMDS to BMW for every supplied part. In accordance with the supplier information dated August 6, 2012, BMW reserves the right to assign a chemical analysis of the part, if data is not provided on time. In such cases, the supplier has to bear the costs (see BMW b2b portal, business letters).

Material data sheets are also required for spare parts, motor cycle parts, technical equipment like satnav systems, bikes, electric cars for children, etc.

If parts are supplied by different facilities with different sub suppliers, separate MDS have to be sent for each facility. This should be taken into account when entering the supplier code.

Please note that the data download from the IMDS into the internal system takes place only once a day. Due to the high volume of data, material data sheets for current type approvals, PPAP and on serial parts list with a valid status are prioritized. The comparison takes place several times a week.

As soon as the MDS is processed, the status becomes visible in the IMDS. The next day, the accepted MDBs are transferred into the internal MDB database. Only then is a status change in the PPAP systems possible. Please note this already at the time of creation and allow enough time for revision loops.

Due to change of the IT system the possibility of linking material data sheets no longer exists.

Material data sheets are compulsory to comply with legal requirements!
Only the IMDS ID of already accepted MDSs should be entered in IPQ!
Linking of material data sheets is no longer available due to IT system change.

2.1 Creating and Sending of material data sheets

The final material data sheets must be submitted to BMW no later than 15 months before SOP or - if the supplier has not yet been nominated at that time - within one month after supplier nomination.

When preparing the MDBs, please take into account the necessary processing time for the review at BMW.

Material data sheets must be submitted no later than 15 months before SOP or within 1 month after supplier nomination!

2.2 Editing of material data sheets

In case after creation and sending a MDS the weight or composition of the part change in a way that the tolerances of the sent MDS are not met anymore, the **MDS has to be updated** (e.g. weight deviation >5%). The updated version must be submitted within one month after the change. If you have to rework a material data sheet without a change of the part number please **do not create a copy** with a new IMDS ID but use the **option “new version”** instead.

Before submitting MDSs get sure that the MDSs are up to date and according to current recommendations and BMW guidance to avoid rejection.

Material data sheets must be submitted within one month after any change in material composition.

2.3 Parts in different colors

Due to IT system change for parts with colour variants, a separate MDB must be submitted for each variant with immediate effect.

For all colour variant a separate MDB must be submitted.

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 (without packaging). 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 sent for these parts if they are used as spare parts.

Scopes of delivery have to be created according to an assembly!
Additional MDSs for the separate parts have to be created if they have BMW part numbers and they are used as spare parts!

2.5 Multivariante parts (wire harnesses, seats)

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

2.6 Preliminary material data sheets

The preliminary material data sheets have to be created according to Recommendation 023. They have to be sent by the supplier without request of the BMW Group (see point 2).

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 ‘preliminary MDSs.

There is no need to create a material data sheet for prototypes or samples!

Prohibited and declarable substances according to GADSL / GS93008 have to be specified.

Compliance with legal requirements for the part must be ensured.

BMW prefers submission as a final MDS (see section 2.1).

Preliminary MDSs are not permitted for initial sampling and must be converted into final MDSs in due time. The necessary processing time for review must be taken into account.

Preliminary MDSs cannot be used for first sampling process (ISIR)!

2.7 Handling of material data sheets

MDs in handshake mode (“send”) are no longer accepted since the IT change. Please use the function to “propose”. Rejected MDs should be edited and resubmitted as soon as possible. If there are further questions the person given in the reason for denial should be contacted.

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

MDs in handshake mode (“send”) are no longer accepted!

2.8 Subcomponents with BMW part number

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

2.9 Forwarding

All MD sent to BMW have to be released for forwarding.

3. Formal Requirements

The following formal requirements **have to 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 MD. All data has to be extracted from the actual resp. sampling relevant BMW order form (see annex with order forms).

3.1 BMW Company ID in IMDS

The IMDS Company ID for BMW, Mini and Rolls Royce MC is **103**.

3.2 Description of parts

- Must be the same as the description on the BMW order form (see annex with order forms)
- Must not contain any vehicle designation.
- For standard parts, the relevant 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

3.3 Part/Item No.

The BMW part number consists of 7 digits (new part numbers can also contain capital letters). 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 or 1A23B45

3.4 Drawing dated

The Alteration index (AI) given in the order form must be entered in the field “drawing dated” (see figure 1 and annex with order forms). The AI refers to the part number and not to the drawing number (ZI). The field is formatted in such way that a date cannot be entered. E.g. Drawing dated: 01

3.5 Drawing change level „NAEL“ (see also KM-Nr. in the order form)

In the field “drawing change” the 6-digit change number (NAEL) must be entered (See figure 1 and annex with order forms.).

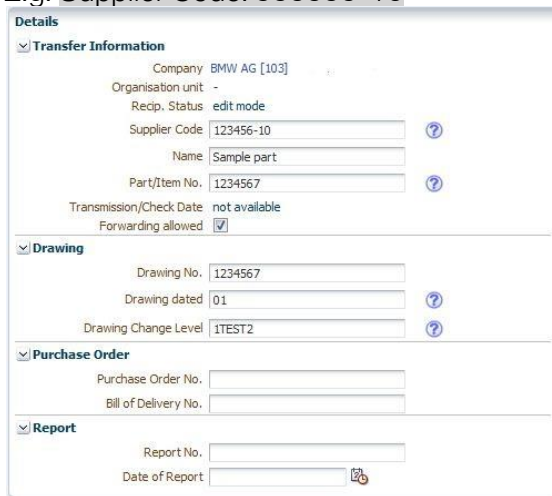
E.g. Drawing Change Level: EKM62N

If the NAEL is not available/unknown “000000” has to be entered.

3.6 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



The screenshot shows a web form titled "Details" with several sections:

- Transfer Information:**
 - Company: BMW AG [103]
 - Organisation unit: -
 - Recip. Status: edit mode
 - Supplier Code: 123456-10
 - Name: Sample part
 - Part/Item No.: 1234567
 - Transmission/Check Date: not available
 - Forwarding allowed: ☒
- Drawing:**
 - Drawing No.: 1234567
 - Drawing dated: 01
 - Drawing Change Level: 1TEST2
- Purchase Order:**
 - Purchase Order No.:
 - Bill of Delivery No.:
- Report:**
 - Report No.:
 - Date of Report:

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 according to VDA 231-106. 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.

Materials which contain of 100 % basic polymer only 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.

The allowed limits for the deviation of the measured and calculated weights are as following:

Weight of the component (subcomponent) X	maximum allowed deviation in %
$X < 1 \text{ g}$	100
$1 \text{ g} \leq X < 100 \text{ g}$	10
$100 \text{ g} \leq X < 1 \text{ kg}$	5
$1 \text{ kg} \leq X < 10 \text{ kg}$	2
$10 \text{ kg} \leq X < 100 \text{ kg}$	1

$X \geq 100 \text{ kg}$

0,5

If components (e.g. 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. Recycled content

It is mandatory to specify the recycled content for all component materials that have been recorded in the CO2e assessment sheet and must be specified according to DIN EN ISO 14021.

An example of reporting a total recycled content of 45% and a breakdown of

Both material flows of 20% and 80% are shown in the figure below.

In addition, an indication of the proportion of bio-based materials must be provided.

This is divided into primary and secondary bio-based materials.

Bio-based materials must be classified in accordance with VDA class 7.1 (VDA 231-106).

The inputs must not exceed a difference between min and max of 20%.

Content of mechanical recydate thereof

45 - 45 %

Content of pre-consumer recydate thereof

20 - 20 %

Content of post-consumer recydate thereof

80 - 80 %

The mandatory specifications of the recycled content in IMDS must be given on an annual average (mass share in percent, over the entire contract period).

Taking into account the contractual agreement on recycled content, the recydate question must be answered in IMDS no later than 8 months before SoP. Deviating values do not release the supplier from the obligation to fulfill the contractual agreements on REC-Q in production.

7. MDSs for IPQ (integrated product quality) for initial sampling

For the first sampling process only **accepted** final material data sheet can be used. Preliminary MDSs cannot be used.

IPQ:

As it is a precondition to have an accepted MDS for a correct first sampling (ISIR), IPQ offers an IMDS ID by searching an accepted MDS with the same part number, alteration index and supplier code. This suggestion has to be confirmed and saved by marking the field "The correctness of the IMDS No. as stated is hereby confirmed".

In IPQ the two different supplier codes for order supplier and production supplier can be given. One of them has to match the code in the MDS.

IMDS entries have to be accepted by BMW in due time before ISIR!

8. MDS Request

Since IMDS Release 4.0 it is possible to request material data sheets from suppliers via IMDS. BMW uses this function to request the MDS which are still missing. It has to be insured that the supplier edits the received requests.. 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 4.3 MDS Request). In that case an optimal tracking of request can be assured. Furthermore the recipient data, given by BMW, can be taken over.

Missing Material Data Sheets are requested via the IMDS Request function and must be processed by the supplier through IMDS!

9. Contact and further information

The current purchasing conditions can be accessed via the b2b portal under the menu item "Functional Areas" – "Purchasing / Direct Material".

For all questions or the submission of the list of part numbers (point 2.3) please use the general email address:

IMDS-Team@bmw.de

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.

Only for specific questions your BMW contact person is:

Dr. Brigitte Stein-Schaller
Brigitte.Stein-Schaller@bmw.de
+49 (0)89 382 51553

BMW MANUFACTURING CORPORATION			
Supplier code		(Order No.)	
BMW Manufacturing Corp., P.O. Box 11000, Spartanburg, SC. 29304-4100			
Supplier No.	999999-10	PURCHASE ORDER 7 654 321	
ABCDEFG-AUTOMOTIVE ATT: CONTROLLER		Order date 09/05/00 Amendment date	
246 MAIN STREET OTOWN, XY 00000 USA		Amendment No.	
		Tel./fax (864) 989-001	Buyer 8944
		Department TS-M-4	
		Page 2	
		Tel. No. (864) 989-007	
		Assistant BLONDINGER	
		Correspondence Code	
Confirmation of TECHNISCHE AENDERUNG NAEL NR. EKM62N		Model application E53 ISIR	
Item	Description	Quantity	Price per Unit USD
	SUPPLIERS ACCEPTANCE OF THE LATEST BMW DRAWING AS DEFINED BY THE PART NUMBER AND CHANGE INDEX OF THIS ORDER. IF THE APPROPRIATE BMW DRAWING, SPECIFICATION AND/OR NORMS FOR THE PART NUMBER AND A.I. LEVEL SHOWN ON THIS PURCHASE ORDER HAVE NOT BEEN RECEIVED BY YOUR COMPANY OR MADE AVAILABLE TO YOU BY BMW MC/AG, PLEASE NOTIFY YOUR BMW MC/AG BUYER WITHIN 48 HOURS AFTER RECEIPT OF THIS PURCHASE ORDER.		
	ISIR PARTS AND OUTSIDE SHIPPING CONTAINERS TO BE IDENTIFIED WITH THE BMW PROVIDED ISIR LABELS.		
	BATESVILLE WAREHOUSE ISIR LOCATION ATTN.: ISIR DEPT. BMW WAREHOUSE 1221 BATESVILLE ROAD GREER, SC 29650		
	PLEASE ACKNOWLEDGE BY: 09/12/00		
	SUPPLIER ASSUMES THE RESPONSIBILITY TO PREPARE THE		
	PART NO. Alteration index (AI)		
	1 1 234 567 AI: 03 5.00 00		
	ASSY XYZ-ANY-PART FRT M00 KM-NO DI: EKM62N C		
	FIRM PRICE VALID FROM 08/31/00 TO 12/31/00		
	Description NAEL (NRCL) Drawing index (DI or ZI)		
	DELIVERY DATE 09/30/00		
	Price for Unit 1-per 1 2-per 10 3-per 100 4-per 1000		

BMW AG

Lieferanten-Nr.

Bayerische Motorenwerke AG, 80788 München, Deutschland

Lieferanten-Nr. **999999-10**

BEISPIEL-AUTOMOTIVE GMBH
-HERR BEISPIELMANN-
HAUPTSTRASSE 15

D-00000 NULLINGEN

(Bestellnummer)



BESTELLUNG

Best.-Angebot
7 654 321

Best.Datum
25/08/03
Änderungs-Datum

Änderungs-Nr.

Telefax 089382-44754	Erkäufer 2338	Abteilung EM-42	Seite 1
Telefon 089382-01234	HERR MUSTERMANN		
Telefon 089382-01235	Bearbeiter FRAU MUSTERFRAU		
Ihre Zeichen			

Vorgang vom **TECHNISCHE ÄNDERUNG NAEL NR. ELU32S** Anforderungsnummer

Pos.	Bezeichnung	Menge	ME	Preis je PE	PE
				EUR	

***** E R S T M U S T E R B E S T E L L U N G *****

FUER DIESE BESTELLUNG GELTEN DIE NACHSTEHENDEN BEDINGUNGEN SOWIE DIE BMW EINKAUFSBEDINGUNGEN FUER PRODUKTIONSMATERIAL UND Kfz - TEILE, BMW FERTIGUNGS-MITTELBEDINGUNGEN, BMW VERSAND-, LIEFER- UND QUALITAETSSICHERUNGSVORSCHRIFTEN, BMW ANFORDERUNGEN ZUR UMWELTVERTRAEGLICHKEIT VON BMW PRODUKTEN, BMW ANFORDERUNGEN ZUR SOZIALVERANTWORTUNG, DAS BMW VERPACKUNGSHANDBUCH, JEWEILS IN DER AKTUELLEN FASSUNG, DIE WIR IHNEN BEREITS UEBERSANDT HABEN ODER DIS SIE IM INTERNET AUF DER BMW ZULIEFERER-HOMEPAGE UNTER FOLGENDER ADRESSE EINSEHEN KOENNEN:

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WIR WEISEN DARAUF HIN, DASS VORGENANNTEN STANDARD-BEDINGUNGEN MIT GUELTIGKEIT AB DEM 23.05.2003 GE-ÄNDERT WURDEN.

ETWA MIT IHNEN SCHRIFTLICH GETROFFENE ABWEICHENDE ODER ZUSÄTZLICHE BEDINGUNGEN GEHEN DEN VORGENANNTEN STANDARDBEDINGUNGEN VOR.

DIE LIEFERUNG IST BESTIMMT SOWOHL FUER DIE FERTIGUNG DER BMW WERKE IM INLAND ALS AUCH IM AUSLAND EINSCHLIESSLICH DER ANGESCHLOSSENEN CKD-FERTIGUNGS-

ME = Maßeinheit
00-Stück
10-mm
11-Inch
12-Foot
13-m
16-Yard
22-cm²
24-dm²
25-Square Inch
28-m²
27-Square Feet
35-Centimeter
37-Cubic Inch
38-Cubic Feet
39-m³
40-g
41-Unze
42-Pfund
43-kg
46-Tonne
50-l
51-AM Pint
52-Brit. Pint
53-AM Quart
54-Brit. Quart
55-AM Gallon
56-Brit. Gallon
60-Minuten
66-Stunden
68-Tage
69-Monat
70-Quartal
71-Jahr
91-Satz
92-Paar

Sach-Nr.

Änderungsindex (AI)

Benennung

1 234 567

AI:09

ZB BEISPIELTEIL VL FACELIFT XY

Z-HINW: 1 234 500

KM-NR ZI: ELU32S M

ALLE FÄHIGKEITEN-NR: 1 234 550

(Zeichnungsindex: ZI)

IS 31/12/0

NAEL

(Zeichnungsindex: ZI)

PE = Preis-Einheit
1-per 1
2-per 10
3-per 100
4-per 1000

Order form1 (English, official order) and 2 (German, official order) with BMW-specific data to be filled in when sending a MDS

Description		Part No.	
Beispiel-Automotive GmbH LAB-Stamm... L P123123100 / 100200/003			
ZB Beispielteil VL Facelift XY 1 234 567		BMW AG, 002	
BMW Dingolfing F 29.08.01 E7K44S-09		BMW AG, 26	
am	geliefert	Liefer-FZ	Losgrösse.....
17.07.03		KO	Vorlaufzeit... 1 Tage
24.06.03	290	640 RE	Prod.Aufträge.. St
15.08.03	200	840 RE	Reserviert.....
22.08.03	600	1.440 RE	Lagerbestand... 255
12.09.03	400-	1.040 F	IN Lieferung... 110 17.09.03
L.And: MUSTERFRAU - 12.09.03			
SaBe.: Mustermann			
AuTe.: KEIN Ausla			
BWK.: Marta Mustermann			
Index: ELU32S-09			
KdZNr:			
VwKz.: Serienteil			
AnInt: KEINE Vereinbarung			
(Order No.)			
LS-Nummer	Datum	geliefert	Liefer-FZ
			AbBn.: 7654321
			7654321
			FeFr: 1 1
			MaFr: ..
F1: Zurück F2: Bestandsauswahl F5: INFO-Tool F24: Weitere			

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.

10. Changed documentation

short description of change	Issue level	Version	Date	Name
	0		April 2014	Dr. Oldenburg-Nazaruk
System changes, new timing requirements, assistance for work	1		September 2017	Dr. Oldenburg-Nazaruk
Process adaption, supplement forwarding, change contact person	2		June 2019	Dr. Stein-Schaller
Update recycled content information, Process adaption	3		November 2023	Dr. Stein-Schaller

Correction of a spelling mistake in chapter 6, adding of version in changed documentation	4	Version 13.1	January 2024	Dr. Stein-Schaller
Adaption of chapter 2.7 due to new BMW IT Tool	5	Version 14.0	May 2024	Dr. Stein-Schaller
Adaption of chapter 6	6	Version 15.0	October 2024	Dr. Stein-Schaller
Adaption of chapter 2.1, chapter 6 as well as additional minor changes and textual adjustments	7	Version 16.0	March 2026	Dr. Stein-Schaller
Removal of all references/processes related to linking (Sections 2.2, 2.3, 7, 8, 9)	8	Version 17.0	April 2026	Dr. Stein-Schaller