

## Notes on creating IMDS material data sheets for KOSTAL Group

This information sheet summarizes the specific requirements of KOSTAL for creating provisional and final material data sheets in the international material data sheet system (IMDS) and provides notes on how to create them correctly. The legal stipulations, as well as general regulations for creating material data sheets as set out in the IMDS recommendations, are not affected by this present document.

### 1. General notes on creating material data sheets

Material data sheets are essential in order to comply with legal regulations and documentation requirements. The lack of accepted data sheets may, for example, threaten the approval of vehicles. By the terms of KOSTAL's purchasing conditions manufacturers are obliged to provide KOSTAL material data sheets via the IMDS. Where data sheets are provided via the IMDS there is no requirement for material data sheets to be provided in paper form. Material data sheet are also required for spares and replacement parts.

#### Note:

As stated in the supplier information note dated 26. February 2016 KOSTAL reserves the right to submit parts for chemical analysis if material data sheets are not provided at the appropriate time and charge the costs to the respective supplier. To verify IMDS data submitted by the supplier, KOSTAL will carry out random laboratory chemical analysis of parts. In case of such an analysis would result in a non-compliance to GADSL, KOSTAL will charge the cost of this analysis and all other cost related to the specific case to the supplier.

KOSTAL reserves the right to charge the supplier the cost for multiple revision of the same MDS in case of necessary rejections.

#### Important:

#### All MDS have to be submitted under IMDS Recommendation 001 Rules

All material data sheets (MDSs) containing deactivated classifications (*1.2 Cast iron; 5.4 Duromers; 5.5.1 Plastics in polymeric compounds; 8.1 Electronics (e.g., PC boards, displays and their components); 8.2 Electrics*) will be rejected. This refers to all submitted MDSs, no matter if the described part is new or a legacy part. Therefore all suppliers, who have submitted MDSs including the already deactivated classifications in a past, must resubmit these MDSs by using a valid classification, which describes the material as detailed as possible. For further information and help for electrical/electronic ( E/E ) components, assembled printed circuit boards ( PCB/PWB, including FCP) and hybrid electronic, please review the new version of IMDS Recommendation 019.

As priority number one, reworked and resubmitted must be all MDSs of materials formerly declared with classification 8.1, which contain SVHC substances with a concentration of 0.1% or more.

As KOSTAL does not have any influence on the decisions of the IMDS Steering Committee, the collaboration of the suppliers in the implementation of these new IMDS rules is mandatory.

## 1.0.1 SCIP database by ECHA

### Important

#### All IMDS MDS must contain the SCIP dossier no.

For each submitted MDS, the supplier is requested to indicate the information for the use of SVHCs in a concentration above 0.1% weight by weight (w/w). This must be done by entering the SCIP dossier no. in the IMDS submissions.

### 1.1. When to create and supply material data sheets

As of supplier nomination, provisional data sheets (see item 1.4) or final material data sheets must be sent to KOSTAL. If final data sheets are sent to KOSTAL at an early stage prior to sampling, it is not necessary to prepare provisional data sheets.

**Final data sheets must be sent at the latest 6 weeks before submission of the sampling. Sampling will not be processed without an approved MDB.**

### 1.2. Revising material data sheets

If the weight or material constituents of the product change after a material data sheet has been created and sent, so that the details are no longer within the tolerances stated in the original material data sheet, **the material data sheet must be revised.**

If a material data sheet is revised without a change in the part number, **please do not generate a copy with a new IMDS ID.** Instead, please use the option "**Create new version**".

If there is a change in the GADSL list or a special request concerning the low are changed and it affect the material constituents, a new version of the material data sheet is required.

If the change level of a part number does not include a change to the material constituents or weight, a new material data sheet is not required.

### 1.3. Extent of deliveries

If several parts are included in a sample submission in a single delivery, a material data sheet for the complete delivery must be sent to KOSTAL. Please state the ID and version of this data sheet in the initial sample inspection report.

If individual items in the delivery have KOSTAL part numbers, material data sheets must also be drawn up for these.

### 1.4. Provisional / Preliminary material data sheets

Recommendation 023 forms the basis for drawing up provisional material data sheets. Suppliers must provide these to KOSTAL without being requested.

Unlike the final material data sheets, provisional data sheets may provide incomplete information on materials. With this exception, the requirements regarding accuracy, completeness and guarantees for final data sheets also apply to all other information in the provisional data sheets. Incomplete data sheets must be clearly identified by the term "development sample submission".

This identification does not mean that a development part or prototype, etc. is being submitted as a sample. It merely indicates that the material data sheet was created while

the product was in its development phase and the details regarding materials are not yet finalized. A material data sheet is not required for development parts, prototypes or hand-made samples!

Prohibited constituents and those requiring declaration to GADSL / GS93008 must be stated. Conformance of the parts with legal requirements must be ensured.

If material data sheets are drawn up as provisional documents, the "ProtMat" materials issued by the IMDS committee (recommendation 023) should be used at the points where the materials are not yet finally determined.

KOSTAL prefers data sheets to be provided as final material data sheets – see section 1.1. Provisional material data sheets cannot be used for initial sample submissions.

## 1.5. Handling data sheets

When sending material data sheets, highlight that it is mandatory to be released internally before to submit to KOSTAL using Send MDS or Propose MDS.

If there are more changes that must be done, a new version of the MDS/Module has to be created.

MDS sent with the status edit mode / handshake mode is not acceptable. The supplier have to submit evaluated by themselves MDS.

Rejected material data sheets should be processed immediately to cover the reason for rejection and returned. Please cancel rejected material data sheets which will not be used again, or where already accepted versions are available. The accepted data sheets are not deleted by this action.

## 2. Formal requirements

The following formal requirements **must be met**, in order to ensure the alignment of essential data in KOSTAL's internal systems. The data required must be entered in **receiver-specific fields** in the form specified later in this document **when sending** or making proposals regarding material data sheets - see Fig. 2.

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4.2	24.05.2018	bloec	5.	C0104894	Release GB				
Datum		Date		Name		Change description			
Masse	2.93	[g]	SI	Erstellt	Name	Dok.typ	Dok.nummer	Dok.stand	Rev.level
Mass			SI	Drawn					
Projektionsmethode	07	03.04.2018	bloecin01	COMDRAW	3.	12035121-2	0001A	4.1	
First Angle Projection									
Skizze	Scale		Teilbenennung						
			Schaltmatte						
Oberfläche	Surface Coating		KOSTAL						
Acc_draw			Leopold KOSTAL GmbH & Co. KG						
Werkstoff	Material		Part name						
SILICON	-SILICON		1. Keypad						
Allgemeintoleranz	General Tolerances		Unabhängigkeitsprinzip nach ISO 8015						
ISO 3302-1-m1			Principle of independency acc. to ISO 8015						
				Artikel Nr.	Article No.	Teile Nr.	Part No.	Dok.stand	Rev.level
						2.	12035121	0001	

Fig.1 KOSTAL drawing

**Details**

**Transfer Information**

Company KOSTAL GROUP [149372]  
 Organisation unit KOSTAL Germany [149384]  
 Recip. Status **accepted**  
 Supplier Code Supplier DUNS Number  
 Name **1.** Keypad  
 Part/Item No. **2.** 12035121 ?  
 Legacy Spare Part **No** ?  
 Transmission/Check Date 7/10/2019  
 Forwarding allowed **Yes**

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**Drawing**

Drawing No. **3.** 12035121-2  
 Drawing dated **4.1 / 4.2** 0001A / 24.05.2018  
 Drawing Change Level **5.** C0104894

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**Purchase Order**

Purchase Order No. -  
 Bill of Delivery No. -

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**Report**

Report No. -  
 Date of Report -

**Fig.2** Recipient Data

**2.1. IMDS Company / Organisation ID**

The IMDS Company ID / organisation unit for all production plants is **KOSTAL Automobil Elektrik GmbH & Co. KG [149384]**.

**2.2. Kostal material identification / description;**

**Fig. 2, item 1**

This must be the same as on the KOSTAL drawing - see Fig. 1, item 1.

For catalogue parts this must be the material identification on the datasheet of the manufacturer.

**2.3. Part number / item number;**

**Fig. 2, Item 2**

For new items this is an 8-digit reference (existing items may have a 14-digit reference). The 14-digit reference is taken from the SAP purchase order which consists of the part number or item number of the drawing and a 3-digit KOSTAL internal key. Any separate letters or numbers following this are omitted when making an entry in the IMDS. e.g., part number / item number 12345678; 12345678901234 (see Fig 1, item 2).

For catalogue parts KOSTAL material number out of the order form may be entered here. Any separate letters or numbers following this are omitted when making an entry in the IMDS. e.g., part number / item number 12345678; 12345678901234 (see Fig 1, item 2).

**2.4. Drawing number;**

**Fig. 2, Item 3**

For KOSTAL designed parts, the KOSTAL document number must be entered here, .e.g. 12345678-2 (see Fig. 1; item. 3).

For catalogue parts datasheet number may be entered here.

## 2.5. Drawing date;

Fig. 2, Item 4

For KOSTAL designed parts, the Rev.-level and the drawing date covering the material which has been ordered must be entered in this field.

Example: Rev. - level / date 0001A / 24.05.2018 (see Fig. 1; items 4.1 and 4.2).

For catalogue parts datasheets Rev.-level and date covering the material which has been ordered must be entered in this field.

## 2.6. Drawing change level;

Fig. 2, Item 5

For KOSTAL designed parts, the change "EC" number shown in the order and drawing must be entered in the "drawing change level" field. This is an 8-character combination of letters and numbers - see Fig. 1 EC-Number: for example C0104894 (see Fig. 1, item 5).

For catalogue parts, no input is necessary.

## 2.7. Purchasing document / order number

KOSTAL purchasing document number must be entered in the "order number" field.

## 2.8. Supplier number

The KOSTAL supplier must be entered in the relevant field. Please use your DUNS number of the production location and not the KOSTAL supplier number. e.g., DUNS: 12-345-6789.

## 3. Use of standard materials (details required for materials)

Please comply with the instructions in VDA 231-106 regarding the correct **material classification**. If the material is described in a public standard (steel, plastic, elastomer) then the material name according to this public standard must be entered.

**Preferably use the materials that are drawn up by the IMDS Steering Committee.**

In case IMDS Steering Committee MDS is used, the application code is responsibility of the data creator.

Please note that if plastic materials are shown without details of the relevant additive, the submission will not be accepted.

## 4. Proportions and tolerance details

When assessing a material data sheet regarding the individual constituent content it is assumed that the maximum amount of material stated by the supplier is present in the product.

Note: "It is not allowed to control the weight by multiplying the quantity of a component."

The deviation values are checked for each component node level and should not exceed the upper limits defined as percentages. The weight ranges and respective limits are shown in Fig.3.

Weight of component (X)	Max. 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

**Fig.3** Weight limits

If components (such as unfinished parts) lose significant amount of weight through further processing (e.g., drilling, milling, etc.) these must be entered and called for as semi-finished products. Any compensation for the loss of weight by excessive deviations (from the measured to the calculated weight) is not acceptable.

Note that MDS must be submitted with the real weight of the part, confirmed via measuring process on the relevant scale.

## 5. Recyclate details

Recyclate field is accessible for material classification 1-5, 7.1 and 7.2. The question if there is recyclate inside the material must be enter with from-to values for post-industrial/pre-consumer recyclate and/or post-consumer recyclate.

For materials of the classifications 5.x the question for Recyclate must always be answered with Yes or No. The range must not exceed more than 20%.

It is essential to state the proportion of recyclate materials used in the case of non-5.x materials and where the weight exceeds 25 g.

### 5.1. Polymeric Parts Marking

Polymeric Parts Marking field is mandatory in case one or more child nodes contain:

- materials with the classifications 5.1.x, 5.4.x and 5.5.x that sum to a weight of more than 100g;
- materials with the classifications 5.2 and 5.3 that sum to a weight of more than 200g.

## 6. ISIR / PPAP

For the initial sample submission the IMDS-ID with a version of a previously accepted material data sheet is essential. Please enter this number in the ISIR cover sheet - for example, IMDS-ID 12345678.

Provisional / Preliminary material data sheets cannot be used for ISIR / PPAP submissions.

If an increase in the change issue number does not change the weight or the constituent make-up of the product you can use the IMDS ID and version of the latest data sheet already accepted when making the initial sample submission - see section 1.2. Otherwise, a new version of the material data sheet must be drawn up.

## **7. Further notes**

The quality guideline for suppliers (downloaded on KOSTAL.com) covers the provision of material data sheets by the supplier. Material data sheets must be provided for all products delivered, as they are part of the PPAP.

IMDS guidelines can be called up under the menu item "help" after logging on to the IMDS.