VDA | German Association of the Automotive Industry

Standardized Exchange of Packaging Information

VDA 9008
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#wirsindbereit

Objective and scope of this Recommendation

This VDA Recommendation describes the standardized exchange of standardized logistics data on the packaging of replacement parts in the automotive industry. This refers to relevant information about the replacement part and all data necessary for packaging the part, including materials, qualities and designations. This VDA Recommendation is intended to eliminate requests for clarification by presenting a proposal for the communication processes while the type of packaging is being determined. The recommendation is not limited to exchanges between the OEM and the supplier; in general it can be applied at any stage in the supply chain between the customer and the supplier. The recommended procedures and their contents can be used for new invitations to tender and/or for planned amendments to existing agreements.

The recommendation is expected to offer the following benefits:
- A structured process for determining the packaging through easily comprehensible and standardized requests for information with a specific, consistent content; avoiding additional work due to missing information,
- Reduction of additional work by standardization; elimination of different data sheets with differing contents, formats and units for each customer/supplier,
- Comparability of technical parameters as the packaging is being determined,
- Examination and verification of compliance with existing quality standards due to identical content of the requested information.

Disclaimer

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1. Structure and area of application of this recommendation

1.1 Structure of the recommendation

This Recommendation follows the classical sequence: determination of requirements, design, approval. The specific requirements can be initiated either by the customer or by the supplier. The design takes the properties of the supplier's product into consideration. Here the implementation of the agreed internal and external requirements is documented. During approval, the customer confirms the solution.

1.2 Area of application of the recommendation

This VDA Recommendation may be applied when packaging is being coordinated and agreed between a customer and a supplier of spare parts in the automotive industry. This may be the case when invitations to tender for new parts are issued, and when existing parts are optimized. It recommends a standardized process for exchanging the standardized logistics data needed to define and agree on packaging for the parts.

2. Exchanging data

2.1 Process description

The process starts with a request. The customer asks the supplier for a packaging proposal. The customer's request may include known minimum requirements and restrictions, which the supplier can feed directly into its response.
The second step is the reply from the supplier with a proposal. The proposal contains all the required information. Optional criteria and descriptive remarks may be added. It is also possible for the supplier to initiate the request. This happens, for example, if the supplier wishes to suggest an improvement to the customer. In this case the first two steps in the process merge into a single step.
After receiving the information, the customer's relevant department validates the packaging proposal. If any questions or comments arise concerning the proposal, the customer will contact the supplier again. This results in a dialog during which all the unresolved points are clarified and the packaging proposal can be revised if necessary. If it becomes apparent during the testing stage that a sample is necessary for the particular packaging proposal or the relevant part, the customer notifies the supplier, who then prepares it and makes it available to the customer. As soon as this sample arrives, it is examined by the relevant departments of the customer to ensure that it satisfies the requirements. If the sample does not pass the tests, the customer again contacts the supplier with a view to the joint development of a satisfactory solution.
If the customer is satisfied with the proposal, no unanswered questions remain, and a sample (if used) has also passed the tests, the customer approves the packaging. The supplier may supply the parts in the approved packaging.
The process ends when the supplier makes its first delivery. If during the examination of the first delivery, or at a later date, the customer identifies problems or wishes to have alterations, the process commences once again.

2.2 Process flow diagram
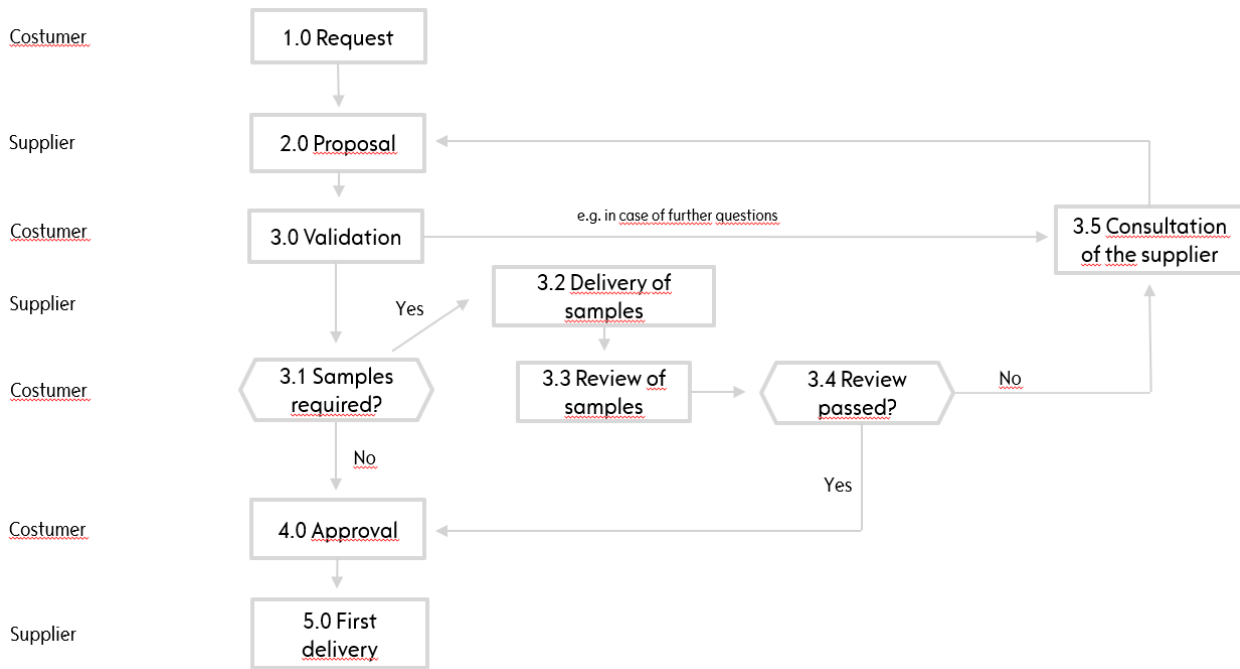
3 Packaging data sheet

The data required for the process are recorded in the Data Sheet (see attachment) that is included with each communication.

3.1 Contents of fields

All the data are provided pursuant to the ISO Directives mentioned below.
The first section of the packaging form contains details about the supplier. This collates all the information that is necessary for exchanging data. The supplier name and supplier number enable its unequivocal identification. Details of a contact person are needed during the process for general communication, requests for clarification, etc. After confirmation the packaging form is also sent to this address.

Section	Field name	Field type	Field content	Field length/ format	Description
Supplier details					
	Date and version	Required	Text		The current date at the time of the request, in the ISO 8601 extended format

					The version number of the document is increased each time a change is made.
	Supplier name	Required	Text		Supplier's official name
	Supplier ID	Required	Text		Supplier's identification code (e.g. ID number, DUNS, etc.)
	Address	Required	Text		Supplier's registered location
	Shipping location	Required	Text		The place from which the goods are dispatched to/ collected by the customer
	Contact person	Required	Text		Person responsible for the parts
	E-mail	Required	Text		E-mail address of the contact person
	Phone number	Required	Text		Telephone number of the contact person

The second section of the Data Sheet contains information about the customer and the responsible contact person. Here, too, the customer's name and number are indicated to enable unequivocal identification, and a person is named for communication. In addition, links may be included to the customer's individual packaging requirements as specified in manuals and guidelines.

Section	Field name	Field type	Field content	Field length/ format	Description
Customer details					
	Customer name	Required	Text		Customer's official name
	Customer ID	Required	Text		Code number for identification
	Contact person	Optional	Text		Person responsible for the parts
	E-mail	Optional	Text		E-mail address of the contact person
	Phone number	Optional	Text		Telephone number of the contact person
	Other applicable documents (e.g. manuals)	Optional	Text		Unequivocal designation of the documents is required; links to the documents are optional.

The next section holds information about the part. (The packaging itself appears further down the form.) It is important to distinguish between the supplier's part number and the customer's part number. Both parties need the other's part number for correct identification and processing in their own systems. However, the customer's part number will appear on any labels

that are printed. For this reason, the customer's description of the part is also included. If other important properties or notes about the part are necessary alongside those listed here (dangerous goods, ESD protection needed, corrosion protection needed), they can be recorded in the comment field that is filled out later. The comment field should also indicate whether any special marking is required on the label, e.g. the EAC conformity mark.

Section	Field name	Field type	Field content	Field length/ format	Description
Product details					
	Supplier's part number	Required	Text		Supplier's internal part number
	Customer's part number	Required	Text		Customer's internal part number (used on printed labels)
	Customer's part description	Required	Text		Description of part as desired by customer (used on printed labels)
	Part dimensions (L x W x H) in mm	Required	Integer		Part dimensions as measured, entered in three fields
	Part net weight (g)	Required	Double		Weight of the part, i.e. all components weighed without packaging
	Vehicle or project	Optional	Text		Customer's designation of the vehicle or project
	Dangerous goods	Required	Yes/no		Indication of whether the goods are dangerous
	ESD protection needed	Required	Yes/no		Indication of whether ESD protection is necessary
	Corrosion protection needed	Required	Yes/no		If 'Yes': indication of the type of corrosion protection necessary: standard / extreme climate / long-term

The packaging is described in up to four levels. The following criteria are therefore given and filled out once for each packaging level. The levels are subdivided into the single packaging, any overpacks/multipacks, and the transport unit. For the transport unit a distinction is made between single-use and returnable solutions, and information is entered in the relevant sections. An optimum loading unit is always indicated for all levels. If the packaging is bulk packaging, or if there are no intermediate levels, the fields that are not needed are left blank. Unpackaged but labeled parts cause a certain amount of work before they are packed into the transport unit. In such cases, one level is used in addition to the transport unit. Within each single level the packaging is always described from the outside to the inside. The form-giving packaging is indicated first. The packaging must always comply with the details given in the customer's packaging manuals and guidelines. If specific requirements apply to certain

products, the customer must specify them in writing. Whenever a supplementary description is needed on the packaging form and the fields listed cannot accommodate it, the comment field on the Data Sheet can be used later for additional notes.

Section	Field name	Field type	Field content	Field length/ format	Description
Packaging levels					
	Packaging proposal	Required	Text		One line per packaging material (e.g. cardboard boxes, bags, cushioning, etc.)
	Outer dimensions in mm (L x W x H)	Required	Integer		Dimensions in three fields. If the packaging is a bag, give its dimensions.
	Quantity of packaging material	Required	Integer		Number of identical packaging units in one level
	Unit of packaging material	Required	Text / code list		Packaging unit (e.g. pcs)
	Packaging price	Optional	Double, indicate unit of currency		Price of the relevant packaging
	Packaging quantity	Required	Integer		Number of packaged parts per level
	Packaging price / part	Optional	Double, indicate unit of currency		Price of the packaging per packaged part for each level
	Material type	Required	Text / code list		Type of material in the individual packaging elements according to the decision 97/129/EG (e.g. PAP20, LDPE4)
	Material marking	Required	Yes/no		Indication of whether packaging elements are labeled according to the customers specifications
	Recycled (%)	Optional	Integer		Indication of which percentage of packaging elements consist of recycled material
	New (%)	Optional	Integer		Indication of which percentage of packaging elements consist of new material
	FEFCO construction	Optional	Text		Type of box according to FEFCO catalog

	Packaging weight (g)	Required	Double		Individual material weights for each level
	Quality	Required	Text		Quality/grade of the packaging used

The last part of the Data Sheet contains important information about the packaging, which is given in addition to the levels. It is generally possible to include pictures and remarks to help illustrate and describe the part or its packaging.

The partners may also share information regarding costs, on the basis of their agreement. The material costs per packaged part can be indicated for the individual levels. This information will then be used to calculate the total cost per part. If handling costs are indicated, they are entered only in this section of the form and always per part. There is no option for breaking these costs down over the various levels. If additional attachments are still needed (e.g. more detailed cost calculations, documentation of test procedures, etc.), this is referenced under "Additional information". These additional documents accompany the packaging form (e.g. by e-mail).

The status field indicates the status reached in the process. It is changed with every process step and can be reset if necessary. Furthermore, this section documents approval of the Data Sheet by the signatures/stamps of the supplier and the customer.

In addition, versioning is used to keep track of the exchange of information at each step of the process. This is particularly important for digitization.

Section	Field name	Field type	Field content	Field length/ format	Description
Other					
	Pictures of the packaging	Optional	JPEG		Pictures of the packaging at various levels
	Remarks	Optional	Text		Additional information and comments on the packaging or part
	Reason for request	Required	Code list		Indication of whether this is a new part or an optimization
	Processing status	Required	Code list		The various status steps within the process
	Order quantity	Optional	Integer		Quantity ordered to fill the unit
	Forecast (annual)	Optional	Integer		Forecast of annual order quantity
	Base price	Optional	Double, indicate unit of currency		Price of the part without packaging
	Material costs/part	Optional	Double, indicate unit of currency		Material costs per part across all levels
	Handling time per part	Optional	Double, time in minutes		Handling time per part across all levels

	Hourly rate	Optional	Double, indicate unit of currency		
	Handling costs/part	Optional	Double, indicate unit of currency		Handling costs per part across all levels
	Additional information	Required	Code list		Indication of whether additional information/ attachments have been included
	Packaging costs/part	Optional	Text		Total packaging costs per part
	Supplier's signature/ stamp	Required	Text		Supplier's signature/stamp indicating approval
	Date of supplier's approval	Required	Date		Date of approval in the ISO 8601 extended format
	Customer's signature/ stamp/digital signature	Required	Text		Customer's (digital) signature/stamp indicating approval
	Date of customer's approval	Required	Date		Date of approval in the ISO 8601 extended format

If additional pictures and documents have to be included for illustration purposes, they may be added on an optional second page to the form. This second page is uniquely linked to the form by the supplier's name and number, and by the supplier's and customer's part numbers, so the page can always be assigned to the correct form. The field "Additional information" can be used to indicate the presence of such attachments.

3.2 Specimen entries for multiple levels

The following example presents information about the possible packaging levels in detail. The four packaging levels describe the packaging proposal from the single packaging all the way to the transport unit. If not all the levels feature in the proposal, the respective sections of the form are left blank. However, it is important that the single packaging and the transport unit always appear in the same place on the Data Sheet, i.e. the single packaging is always given at level 1 and the transport packaging is always given at level 4.
All the criteria and information for describing the packaging are repeated for each level and each kind of packaging. At each stage, the component parts are listed from the outside to the inside, with the form-giving packaging always indicated first. When the quantity of packaging is entered, the number of pieces per level must be indicated. If one type of packaging is used more than once at a single level, this may be broken down automatically into weights and prices per piece. Here it is important that the packaged quantity of parts per level is indicated. From the second level onward, the packaging in the previous level is not indicated again, to prevent it from being counted twice in the calculations. At the fourth level, a distinction is made between single-use and returnable solutions, and the corresponding line of the form is

filled out. Pictures may be attached to help describe the packaging proposals. This enhances general understanding. The comment field can also be used for additional information and descriptions.

Packaging levels	Packaging proposal	Outer dimensions in mm (L x W x H)			Quantity of packaging material	Unit of packaging material	Packaging price	Part quantity per level	Packaging price / part	Material type	Material marking	Recycled (%)		FEFCO construction	Packaging weight (g)	Quality
												Recycled	New			
Packaging level 1								1	0,15 €							
Single packaging	solid fiberboard box	24	27	88	1,00	Piece	0,10 €		0,100 €	PAP 21	No	0%	100%		4	GD2 250G/M²
	cardboard sleeve	23	23	25	1,00	Piece	0,05 €		0,050 €	PAP 20	No	0%	100%		3	
Packaging level 2								10	0,03 €							
1. Level overpack	solid fiberboard box	130	90	47	1,00	Piece	0,20 €		0,020 €	PAP 21	No	0%	100%		23	GD2 300G/M²
	Label	60	50		1,00	Piece	0,05 €		0,005 €	PAP 22	No	0%	100%		1	
Packaging level 3								200	0,00 €							
2. Level overpack	Cardboard box	270	240	200	1,00	Piece	0,40 €		0,002 €	PAP 20	No	0%	100%	0201	208	VDW 1.01
	Label	60	50		1,00	Piece	0,05 €		0,000 €	PAP 22	No	0%	100%		1	
Total costs single packaging / part									0,177 €							
Packaging level 4: Transport unit								12.000								
One way packaging	Pallet	1140	974	134	1,00	Piece	10,00 €		0,001 €	FOR 50	Yes	0%	100%		13000	VS7 DIN4074
	Pallet box	1120	940	914	1,00	Piece	10,00 €		0,001 €	PAP 20	Yes	0%	100%		6500	DIN 55 468-2.40YB
Returnable packaging										✕	✕	✕	✕			
Pictures of the packaging									Comments: Single packaging (1.Level) with print, no need of labeling							

4   Agreements between customer and supplier

A large number of agreements between the customer and the supplier are recorded in customers' manuals and guidelines that define specific requirements. They can also clarify the deadlines after which certain assumptions are valid during the communication process. For example, the parties may decide that a packaging proposal accepted by the customer is also automatically accepted by the supplier after a certain period of time without requiring explicit confirmation. This is assumed unless the supplier expresses an objection or issues comments within the defined period.

Furthermore, each party is responsible for ensuring that during its own processes all the data are supplied and it has either asked or answered all the relevant questions. The increased efficiency resulting from a standardized procedure for sharing logistics data can only be realized if each party operates efficiently and contributes to quality assurance by providing complete logistics data and all potential information and questions within the relevant time period.

5 Annexes

Packaging Data Sheet														
Supplier details														
Date and Version:			Supplier name:											
Supplier ID:			Contact person:											
Address:			e-mail:											
Shipping location:			Phone number:											
Costumer details														
Costumer name:			Costumer ID:											
Contact person:			E-Mail:											
Phone number:			Link to packaging manuals:											
Product details														
☐ Dangerous goods:		☐ ESD protection needed:					☐ Corrosion protection needed:							
Supplier part number:			Part Dimensions(LxWxH) in mm:											
Costumer part number:			Part-net-weight in (g):											
Costumer part description:			Carline / Project:											

Packaging levels	Packaging proposal	Outer dimensions in mm (L x W x H)			Quantity of packaging material	Unit of packaging material	Packaging price	Part quantity per level	Packaging price / part	Material type	Material marking	Recycled (%)		FEFCO construction	Packaging weight (g)	Quality
												Recycled	New			
Packaging level 1								1	0,00 €							
Single packaging																
Packaging level 2									0,00 €							
1. Level overpack																
Packaging level 3									0,00 €							
2. Level overpack																
						Total costs single packaging / part			0,000 €							
Packaging level 4: Transport unit																
One way packaging																
Returnable packaging																
Pictures of the packaging								Comments:								

Reason for request		Processing status		Total packaging costs:		
New part				Material costs/part:		0,000 €
Hourly rate handling:		Handling time per part in minutes:		Handling costs/part:		
Order quantity:	Forecast (year):	Base price:		Additional information:		no
Supplier signature/stamp:		Costumer signature/stamp:		Packaging costs per part:		
Date:		Date:		**0,000 €**		

5.1 With Valid documents

The contents of this recommendation have been defined as an interface at Odette:
- Packaging Master Data DOC REF No: OM42
- Packaging Master Data DOC REF No: OM43

VDA

The German Association of the Automotive Industry (VDA) consolidates about 650 manufacturers and suppliers under one roof. The members develop and produce cars and trucks, software, trailers, superstructures, buses, parts and accessories as well as new mobility offers. We represent the interests of the automotive industry and stand for modern, future-oriented multimodal mobility on the way to climate neutrality. The VDA represents the interests of its members in politics, the media, and social groups. We work for electric mobility, climate-neutral drives, the implementation of climate targets, securing raw materials, digitization and networking as well as German engineering. We are committed to a competitive business and innovation location. Our industry ensures prosperity in Germany: More than 780,000 people are directly employed in the German automotive industry. The VDA is the organizer of the largest international mobility platform IAA MOBILITY and of IAA TRANSPORTATION, the world's most important platform for the future of the commercial vehicle industry.

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