

/ARGE



Data Quality Guideline of the HVAC Industry

Annex 1 to DQG 11.0:

**Definition of Data Contents
and Data Quality Principles**

Version 11.0

Edited: 24/11/2025

Translated: 22/02/2026



Introduction

The continuous improvement of the quality of electronic product data represents the basis of any process optimization.

Achieving a higher product data quality is the common goal of all distribution levels and also encompasses the involvement of all market partners of the HVAC industry. In order to further optimize the standardized electronic data exchange – and in particular the quality of the article master data – in the future, harmonizing the standards and regulations existing in the field and documenting the partners' individual requirements are issues important to the industry, trade and crafts. This is intended to provide common ground for all those involved for the next steps to be taken while working towards improved data quality.

This document provides a detailed overview of the data contents that are identical for all distribution levels and of the understanding of data quality. When it comes to data contents, it is important that all distribution levels share the same structure, and above all the same understanding regarding content. Defining data contents is not about describing an interface for exchange between software systems, but about showing comprehensive detailed information on the respective contents.

Points of contact:

ARGE Neue Medien e. V.
Klingenderstraße 10 - 14
33100 Paderborn/Germany
Phone no.: +49 5251 87288-0
Email: info@arge.de
Internet: www.arge.de

Deutscher Großhandelsverband Haustechnik e. V.
Viktoriastraße 27
53173 Bonn/Germany
Phone no.: +49 228 62905-0
Email: info@dg-haustechnik.de
Internet: www.dg-haustechnik.de

Zentralverband Sanitär Heizung Klima
Rathausallee 6
53757 Sankt Augustin/Germany
Phone no.: +49 2241 9299-0
Email: info@zvshk.de
Internet: www.zvshk.de

Bundesverband Bausoftware e.V.
Budapester Straße 31
10787 Berlin
Phone no.: +49 30 25757750
Email: info@bvbs.de
Internet: www.bvbs.de

Table of contents

| | | |
|-------|-------------------------------------------------------------------------|----|
| 1 | Definition of data quality | 15 |
| 1.1 | Quality categories | 15 |
| 1.2 | Article types | 17 |
| 2 | Header data | 18 |
| 2.1 | Data contents at header level | 19 |
| 3 | Basic article data | 20 |
| 3.1 | Article numbers | 20 |
| 3.2.2 | Factory article number | 21 |
| 3.1.2 | Factory article number catalogue (Werksartikelnummer Katalog) | 20 |
| 3.1.3 | Trade article number (Handelsartikelnummer) | 21 |
| 3.1.4 | GTIN | 21 |
| 3.2 | Article validities | 21 |
| 3.2.2 | Start of validity | 21 |
| 3.2.2 | End of validity | 21 |
| 3.3 | Deletion of articles | 22 |
| 3.4 | Alternative articles, discontinued articles, and successor models | 22 |
| 3.5 | Production period | 23 |
| 3.6 | Deep Link | 23 |
| 3.7 | Raw materials | 24 |
| 3.8 | Series | 24 |
| 3.9 | Model number | 24 |
| 3.10 | WELL label | 25 |
| 3.11 | Accessories | 25 |
| 3.12 | Control indicators | 25 |
| 3.13 | Packaging disposal | 26 |
| 3.14 | Match code | 26 |
| 4 | Product texts | 27 |
| 4.1 | Requirements on character set and formatting | 27 |
| 4.2 | Short text 1 and 2 | 27 |
| 4.3 | Attribute order of the short texts | 28 |

- 4.4 Long texts 29
- 4.5 Dimension texts 29
- 4.6 Short article summary 29
- 4.7 Article summary 30
- 4.8 Marketing text 30
- 4.9 Application note 30
- 5 Attributes 31
 - 5.1 ETIM classification 32
 - 5.2 Keywords 34
 - 5.3 Assumption of Liability Agreement of the ZVSHK 34
 - 5.4 Allocation of fees to articles (calibration fees) 35
 - 5.5 Regulations 35
 - 5.5.1 Energy efficiency classes 36
 - 5.5.2 UBA positive list 39
 - 5.5.3 Hazardous goods (transport ADR) 41
 - 5.5.4 REACH regulation 43
 - 5.5.5 Information on hazardous substances 44
 - 5.5.6 Battery information 46
 - 5.5.7 Indication ECHA data base 47
 - 5.5.8 Disposal / WEEE registration number 48
 - 5.5.9 Explosive substances regulation 49
- 6 Prices 50
 - 6.1 Price on request 50
 - 6.2 Sales tax class 51
 - 6.3 Invoicing basis 51
 - 6.4 Price lines 51
- 7 Groups 52
 - 7.1 Commodity group 52
 - 7.2 Product group 53
 - 7.3 Discount group 53
 - 7.4 Bonus group 54
 - 7.5 Group document allocation 54

- 7.6 Group structure trade to specialized crafts businesses 55
 - 7.6.1 Commodity groups trade 55
 - 7.6.2 Product groups trade 55
- 8 Logistics 56
 - 8.1 Net dimensions and weights 56
 - 8.2 Information on the content 56
 - 8.3 Basic article 57
 - 8.4 Packaging units 60
 - 8.5 Minimum order quantity 63
 - 8.6 Article sets 64
 - 8.7 Logistical sets 65
 - 8.8 Durability 66
 - 8.9 Standard delivery period 66
 - 8.10 Exportable articles 66
- 9 Media data 67
 - 9.1 Images 67
 - 9.1.1 Web images 68
 - 9.1.2 Print images 68
 - 9.1.3 Media types for images 69
 - 9.2 Documents 71
 - 9.2.1 Media types for documents 72
- 10 Spare parts lists 74
- 11 Historical products 75
 - 11.1 Allocation of documents to historical products 76
- 12 Typical applications 77

Version history

Annex 1 to the DQG 11.0 as of 19/10/2025

Overview of alterations and amendments to DQG 9.0, Annex 1

- Chapter 3.2.3** Not available for order before
Inclusion of date specification “Not available for order before”
- Chapter 3.2.4** Not available before
Inclusion of date specification “Not available before”
- Chapter 3.2.5** No marketing before
Inclusion of date specification “No marketing before”
- Chapter 3.3** Deletion of articles
Addition of supplementary provision for article sets and logistical sets
Addition of the proviso that it is not possible to reactivate a deleted article
- Chapter 3.4** Alternative articles, discontinued articles, and successor models
Inclusion of manufacturer identification
- Chapter 3.11** Labelling of article accessories
Inclusion of labelling of article accessories
- Chapter 3.12** Article accessories
Inclusion of manufacturer identification
- Chapter 5.1** ETIM classification
Display of items for which no ETIM class exists
- Chapter 5.7.1** Energy efficiency classes
Inclusion of attribute for the EPREL registration identifier
- Chapter 5.7.12** Deforestation Regulation (EUDR)
Inclusion of the regulation in the attributes
- Chapter 6** Prices
Inclusion of description of raw material surcharges
- Chapter 8.5** Article sets
Inclusion of manufacturer identification
- Chapter 8.6** Logistical sets
Allowing changes to the components
Inclusion of manufacturer identification
- Chapter 8.8** Standard delivery time
Limitation to 3-digit values
- Chapter 9.1** Images
Adjustment of the sorting order. This does **not** need to be consistent across all uses.
- Chapter 9.1.1 & 9.1.2** Web images and print images
Inclusion of the SVG format
- Chapter 10** Spare parts lists
Inclusion of manufacturer identification

1 Definition of data quality

Defining data quality is first and foremost about evaluating the article master data quality of different databases applying fixed and consistent quality criteria, and, on the basis of the findings, increasing said quality in the long term. The manufacturer-specific requirements existing in the industry prevent the single organizations from fulfilling certain requirements on data quality, because inspection-relevant data contents are not relevant to the product portfolio and are not commonly used. For this reason, it is necessary to consider data quality or the fulfilment of a quality requirement separately in individual cases. To this end, **a so-called manufacturer profile** is implemented. In there, the organization may transmit general requirements and statements on specific data contents together with its data delivery. **This profile will be an integral part of every data verification and facilitate a differentiated evaluation** of the master data at hand.

A **to-do list** will be implemented in addition to the manufacturer profile. By means of this additional list, an organization is invited **to give binding statements as to by when they will be able to fulfil requirements** that cannot be fulfilled immediately. It is the responsibility of the ARGE to check that the binding statements are upheld.

1.1 Quality categories

When determining and classifying the quality of product master data, the following quality categories apply:

Quality category 1 – technically necessary:

These are contents that are necessary from a technological point of view to ensure that a master data record can be processed (e.g. article number).

Quality category 1* – technically necessary if used:

A content consists of different information details. If the content is started with the first information detail, giving further information details may become necessary. Price information for instance consists of the actual price, i.e. the value, but also of other necessary information, namely price type, currency, price basis, and price basis unit.

Quality category 2 – quality criterion obligation:

These are contents that are not mandatory from a merely technological point of view, such as an article number, but are indeed mandatory in terms of content. For instance, an image will be mandatory for each standard product.

Quality category 3 – conditional quality criterion obligation:

A condition such as a product characteristic makes certain further information necessary. If a product has the characteristic of being a hazardous substance, providing further details such as UN number, hazard class or transport category is mandatory. Another condition for the mandatory provision of data contents is the use in publications, such as in print media or on the Internet, provided that these publications are publicly available documents.

Quality category 4 – complementary quality criterion for good data quality:

By providing information such as the definition of accessory lists relating to a product, a service may be rendered to one's own customers. Hence, this is a content by means of which a quality requirement on the data is fulfilled, thus achieving a quality criterion.

Quality category 5 – optional:

The data contain additional contents that further increase quality, for instance URLs leading to more detailed article information or documents such as installation- or maintenance instructions.

1.2 Article types

Article types are defined in order to be able to also consider article particularities with regard to quality requirements. The article type specifies the kind of article (e.g. standardized article, variant article, custom-built article, service/software, etc.). It will be used for steering the processes at wholesale. The allocation of the article type has always to be oriented towards the article.

The **article type** is fixed and **cannot normally be changed**, except in the following cases:

1. Correction in the event that the article is stated wrong so far.
2. Correction in the event, that the article is stated in another way because a new article type has been implemented in the DQG.
3. Change of article type within the spare parts (ERA, ERB and ERC).
4. Change of article type from 'Standardartikel' (article type STD) to 'Ersatzteil' (article types ERA, ERB and ERC)
5. Change of article type from 'Standardartikel' (article type STD) to 'Logistisches Set' (article type LOS)
6. Change of article type from 'Standardartikel' (article type STD) to 'Packstück' (article category PSK)

As a rule, users are invited to provide information as comprehensively as possible.

The following table provides an overview of possible article types and a description of their contents:

| Article type | Definition |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standardartikel | All articles are standard articles, unless they are allocated to one of the following article types. |
| Ersatzteil A | Spare parts that are "fast-moving items", i.e. this article is in high demand. From the manufacturer's point of view, these spare parts should be available in the warehouses of the trade. The class A spare parts supplied should account for approx. 80 % of the total sales of spare parts by a manufacturer. |
| Ersatzteil B | Spare parts that are "slow-moving items", i.e. this article is in demand, however not in high demand. The manufacturer recommends that the trade keeps these spare parts in stock. The class B spare parts supplied should account for approx. 15 % of the total sales of spare parts by a manufacturer. |
| Ersatzteil C | Spare parts that are seldom ordered. The manufacturer does not recommend that the trade keeps these spare parts in stock. The class C spare parts supplied should account for approx. 5 % of the total sales of spare parts by a manufacturer. |
| Variante | A basic product that will only be made available as an article in its final form, e.g. as a combination of colour, surface, handles or materials. For variant articles the following determinations apply: <ul style="list-style-type: none"> • The article is orderable by specification of additional information (characteristic of the features) only. • The article has a description, which features can be expressed. • An order by the article number is not possible as specifications are missing. |

| | |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Maßanfertigung | An article whose final form is specifically defined, e.g. in agreement with the customer. |
| Dienstleistung/Software | Services are e.g. calibration fees or measurement fees. |
| Set | If several articles are combined to form one article, they become a set. |
| Logistisches Set | If an article is delivered in several logistic units that cannot be ordered separately, thus it is about a logistical set. As at "Logistical set" the components are used within the logistic processes, they do have no dimension of the packaged basic (dimension length, width, height). These are stated at the components. Stating the packaging units is not useful. |
| Packstück | A not orderable article that can be used as a component of a „Logistical set“. As the article is relevant for the logistic processes only, they do not have all statements. The statement of prices is not necessary. |
| Sonderartikel (< 1 % Sortiment) | Articles that are no standard articles and cannot be allocated to any other article type, such as sample boards, are non-core items. |
| Kalkulationsartikel | Calculation items are items based on which articles can be defined in more detail (e.g. m ² of a panel heating). These items are not available for order and are intended for the calculation or estimation of an article that is available for order. |
| Schüttgut | Bulk goods are bulkable granular or lumpy materials. |
| Preislinienartikel | Article that has factory list prices for several price lines. The line prices replace the standard information of the factory list price. The specification "Price on request" and "RRP" is not possible for this article type. |
| Gebühr | The article constitutes a fee (e.g. calibration fee). The fee can be allocated to an article, e.g. a water meter. The specification "Price on request" is not possible for this article type. Specifications, such as logistic information, images and documents, are not required. |

2 Header data

All information pertaining to a master data delivery are divided in header- and article data. The header data are so-called “administrative data” for the master data server and contain **the technically required information on the entire data delivery**. On the one hand, these are information on the supplier or organization, and on the other hand information on the catalogue. A catalogue is a master data record. A supplier may have several catalogues that divide their existing overall range in sub-ranges. For instance, sub-ranges can be product lines, brands, or products and spare parts.

2.1 Data contents at header level

In the first instance, the information on the data contents at header level refers to all information known on the data supplier. This is followed by comprehensive information on the entire data delivery.

| Content | Description | Structure |
|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| Datenlieferant ID | Unique identification of the data supplier. For example: <ul style="list-style-type: none"> • GLN | Text 13 |
| Datenlieferant ID Typ | Type of the ID of the data supplier. For example: <ul style="list-style-type: none"> • GLN (code “gln”) • Open data check (code “opendatacheck_shk”) • Duns (code “duns”) | Text 35 |
| Datenlieferant Name | Company name or legal name of the manufacturer | Text 20 |
| Datenlieferant Kürzel ARGE | Technically required 2-character manufacturer code according to the list of abbreviations for ARGE members | Text 2 |
| Katalog ID | Clear identification of the catalogue, consisting of participant ID, country code, and catalogue name | Text 35 |
| Katalog Name | Descriptive name of the catalogue, identical with <Name der Lieferung> | Text 35 |
| Gültigkeit Katalog Beginn | The start of validity indicates the date from which the catalogue shall be valid as a whole. Please note: Any start of validity at article level always takes precedence! | Date (DDMMYYYY) |
| Gültigkeit Katalog Ende | The start of validity indicates the date up to which the catalogue shall be valid as a whole. Please note: Any end of validity at article level always takes precedence! | Date (DDMMYYYY) |
| Bezeichnung der Datenlieferung | Content description of the data delivery: e.g. 2026 price list | Text 100 |
| Hinweise zur Datenlieferung | Description of the major changes transferred with the data delivery | Text 1000 characters |
| Artikel mit system-beteiligungspflichtiger Verpackung vorhanden | Article with packaging subject to system participation included | Yes/No |
| LUCID-Nummer | LUCID packaging register number | Text 20 |
| Entsorgungsdienstleister | Name of the disposal service provider | Text 80 |

| | | |
|-------------------------------|------------------------------------------------------------------------------------------------------------|----------|
| Prüfkonstante | Test constant for ensuring the font. Constant value "1234567890abcdefghijklmnopqrstuvwxyzüöäÜÖÄÜß@€" | Text 256 |
| Versionsnummer | Version number of the DQG Constant value '11.0' | Text 4 |
| URL Ersatzteilsystem | URL to the manufacturer's spare parts system | Text 256 |
| Beschreibung Ersatzteilsystem | Description of the spare parts system | Text 256 |
| Postadresse | The manufacturer's street address | Text 256 |
| Elektronische Adresse | An email address or a link to a contact form for the manufacturer | Text 256 |

3 Basic article data

Basic article data contain all **information on a product**. For better clarity and easy topic-based search, information on specific topics (e.g. product texts, attributes, prices, groups, logistics, media data) has been divided in separate chapters. This division represents **no** hierarchical structure or sorting of information regarding the article master data.

3.1 Article numbers

The clear allocation or identification of data is just as important as their completeness and up-to-dateness. A key element in this is that the article numbers used in the master data have a similar structure to those used in print media (e.g. catalogues or brochures). Therefore, an article number should always correspond to the number printed on the articles without blanks and special characters. If a new numbering system is introduced, it should not contain any blanks or special characters (i.e. only 0-9, A-Z are permitted) or leading zeros. An article number remains valid for 15 years before it can be reused. Every change to an article published in the market requires a new article with a new article number and GTIN (examples: changed accessories, spare parts, parts lists, advertised improvements, changed base measuring unit).

We distinguish between the following article numbers:

3.1.1 Factory article number

The factory article number is the central key denomination and is assigned to ensure the **clear identification/recognition of an article**. This article number must be unambiguous across all sub-ranges, catalogues and variants and is assigned ex works by the organization.

| Content | Description | Structure |
|--------------------|-----------------------------------------------------------------------------------------|-----------|
| Werksartikelnummer | Unambiguous article number consisting of digits and characters Example: JKS300620112 | Text 15 |

3.1.2 Factory article number catalogue (Werksartikelnummer Katalog)

It is possible to state an additional <Werksartikelnummer Katalog> as long as it deviates from the actual factory article number with regard to the characters used, character length and character set (e.g. PDF documents). In practice, the **structure of the <Werksartikelnummer Katalog> can be compared to the factory article number**; however, special characters are used in the relevant print medium.

| Content | Description | Structure |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| Werksartikelnummer Katalog | Blanks and special characters are possible; character set may deviate from the factory article number. Example: JKS_300/620 112 in the PDF document used | Text 35 |

3.1.3 Trade article number (Handelsartikelnummer)

Articles may be assigned another article number by the trade for internal administrative purposes. This <Handelsartikelnummer> is **only relevant in the relationship between trade and crafts** and is used there.

| Content | Description | Structure |
|----------------------|-------------------------------------------|-----------|
| Handelsartikelnummer | Relevant in the trade/crafts relationship | Text 15 |

3.1.4 GTIN

The GTIN is the successor to the former EAN and describes an **unambiguous article key in the European area**. Stating the GTIN is an important quality characteristic for the actual products. There are some exceptions in the assortment (cf. chapter 1.2) where the GTIN is often missing.

| Content | Description | Structure |
|------------|-------------------------------------------------------------------------------------|-------------|
| GTIN (EAN) | GTIN consisting of 13 or 14 characters to identify the article within the catalogue | GTIN format |

The GTIN constitutes a unique identification of an article. Reuse has been prohibited by GS1 since 1 January 2019. For further details please refer to <https://www.gs1-germany.de/gtin-non-reuse/>.

3.2 Article validities

Information on validities are to be understood as **combined article- and price validities of an article**. The validity information at article level may vary from the information in the header data, which refer to the entire data delivery.

These details are non-binding and may be changed in subsequent data deliveries.

3.2.1 Start of validity

Example: A new article will only be sold from 01/04/2026; start of validity of the entire data delivery is 01/04/2026.

| Content | Description | Structure |
|---------------------------|-------------------------------------------------------------------------------------------------|-----------------|
| Gültigkeit Artikel Beginn | Start of validity at article level: precedence over validity at header level. Example: 01042026 | Date (DDMMYYYY) |

3.2.2 End of validity

Example: An article will expire on 30/06/2026, but the end of validity of the entire data delivery in the header data is 31/12/2026.

| Content | Description | Structure |
|-------------------------|-----------------------------------------------------------------------------------------------|-----------------|
| Gültigkeit Artikel Ende | End of validity at article level: precedence over validity at header level. Example: 30062026 | Date (DDMMYYYY) |

3.2.3 Not available for order before

Indication that a newly added item cannot be ordered before the specified date.

The information can only be provided for new items or if the information was already provided in the latest data delivery for an item. If the information is not available in a data delivery, it cannot be re-entered in subsequent data deliveries.

| Content | Description | Structure |
|----------------------|---------------------------------------------------------------------------------------------------|-----------------|
| Nicht bestellbar vor | Indication that a newly added item cannot be ordered before the specified date. Example: 30062026 | Date (DDMMYYYY) |

3.2.4 Not available before

Indication that a newly added item will not be delivered before the specified date.

The information can only be provided for new items or if the information was already provided in the latest data delivery for an item. If the information is not available in a data delivery, it cannot be re-entered in subsequent data deliveries.

| Content | Description | Structure |
|---------------------|-------------------------------------------------------------------------------------------------------|-----------------|
| Nicht lieferbar vor | Indication that a newly added item will not be delivered before the specified date. Example: 30062026 | Date (DDMMYYYY) |

3.2.5 No marketing before

Indication that a newly added item may not be marketed/advertised before the specified date.

The information can only be provided for new items or if the information was already provided in the latest data delivery for an item. If the information is not available in a data delivery, it cannot be re-entered in subsequent data deliveries.

| Content | Description | Structure |
|-----------------------|----------------------------------------------------------------------------------------------------------------|-----------------|
| Keine Vermarktung vor | Indication that a newly added item may not be marketed/advertised before the specified date. Example: 30062026 | Date (DDMMYYYY) |

3.3 Deletion of articles

Articles that are no longer distributed by the manufacturer must be communicated to the market partners. The communication takes place in several steps. The steps are:

1. Announcement that the article is withdrawn from sale

The announcement is made by setting a discontinuation tag and stating a discontinuation date. Optionally, 1 to 3 successor models can be stated.

2. Deleting the article in the data delivery

The deleting can be done in two ways:

- a. Omitting the article in the data delivery
- b. Setting the deletion tag for the affected article.

It is recommended to provide the article with a deletion tag at least once.

The following regulations apply for deleting (omitted or marked for deletion):

- Articles may only be omitted if they were marked as discontinued articles in the latest data delivery and the discontinuation date is at least 12 months before the start of validity of the current data delivery (header data).
- The discontinuation date may be no more than 24 months in the future (discontinuation date at the start of validity).
- Articles with a discontinuation date of 24 months in the past (discontinuation date at the start of validity) must be deleted from the data delivery (omitted or marked for deletion).

As the discontinuation date is an estimated discontinuation date, it may change over time. In this case, the discontinuation date can and should be adjusted with the next data delivery.

A deleted article cannot be reactivated.

| Content | Description | Structure |
|----------|---------------------------------------------------------------------------------------|------------|
| Löschung | Labelling: Yes, No The mandatory values are defined in Annex 4 <i>Code lists</i> . | Value list |

3.4 Alternative articles, discontinued articles, and successor models

Alternative articles are articles that are **similar to the original article** and can be used in its stead. Consequently, alternative articles need to be available in the assortment.

A **discontinued article** is an article that **will be deleted from the assortment in the future**. It is assigned a discontinuation date in the data record. If there is a **successor model** to the discontinued article, it is **labelled accordingly**, and the factory article number of the successor model will be required. If necessary, up to three successor models may be given. For discontinued articles, all data such as prices, images, dimensions and weights etc. must still be provided.

| Content | Description | Structure |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| Alternativartikel | Indication of an article number => reference to an article from the assortment that can be used instead of the required article | Text 15 |
| Auslaufartikel | Labelling: Yes, No, Yes with successor model | Value list |
| Auslaufdatum | Indication of the expected discontinuation date if labelled as a discontinued article Deletion no earlier than 12 months after discontinuation date | Date (DDMMYYYY) |
| Nachfolgeartikel | Article number of the successor model which needs to be stated in the data delivery. Indication is relevant if labelled as a discontinued article with successor model. Indication of 3 possible successor models max. | Text 15 |
| Hersteller ID | Unambiguous identification of the manufacturer e.g. GLN | Text 13 |
| Hersteller ID Typ | Type of manufacturer ID e.g. • GLN (Code "gln") • Open data check (code "opendatacheck_shk") Duns (Code "duns") | Text 35 |

For the mapping of alternative articles and successor models within the data provided by the wholesale trade for the craft trade, the typification of the references is optional. Furthermore, the manufacturer's information can be used, as not all articles must be included in the wholesale catalogue. The typification and the manufacturer's information are only relevant in the relationship between retail and the skilled trades and are not displayed by the ARGE systems. An industrial company cannot supply the type because it is not displayed in the corresponding interfaces and software systems.

3.5 Production period

Production periods can be stated for all articles in the assortment. For active articles, the start of production is stated. **If an article is discontinued** and ceases to be produced, stating the end of production makes this article a **<historical product>** (cf. chapter 11).

| Content | Label | Structure |
|--------------|------------------------------------------------------|--------------------|
| Baujahr von | Start of the production period | Date (DDMMYYYY) |
| Baujahr bis | End of the production period | Date (DDMMYYYY) |
| Baujahr Text | Notes/annotations regarding the years of manufacture | Text 35 |

3.6 Deep Link

Giving a Deep Link (URL) is a complement and redirects to a relevant webpage of the industrial company where further information on the article may be found. The organization is responsible for the function of the Deep Link. One Deep Link per article can be provided.

| Content | Description | Structure |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| Deep Link URL | URL of a website to access further article information. Example: http://www.manufacturer.de/article/articlenumber/4711211 | Text 256 |

3.7 Raw materials

Information on the raw materials of an article describes the **imputed ingredients of a product**. Price-relevant raw materials of a products should be transmitted to the master data server. For each article, several raw materials with further information may be named:

| Content | Description | Structure |
|-------------------|-----------------------------------------------------------------------------------------------------------------------|----------------|
| Material | Raw material that the information refers to The mandatory values are defined in Annex 4 <i>Code lists</i> . | Value list |
| Gewichtsbasis | Total weight of the article/product | Decimal number |
| Basiseinheit | Weight unit in line with the value list The mandatory values are defined in Annex 4 <i>Code lists</i> . | Value list |
| Gewichtsanteil | Proportion of the raw material in question: e.g. per cent | Decimal number |
| Anteileinheit | Proportion unit of the raw material The mandatory values are defined in Annex 4 <i>Code lists</i> . | Value list |
| Rohstoffnotierung | Commodity price based on which the price was calculated: in each case related to 100 kilograms of the raw material | Decimal number |

3.8 Series

A series brings different products together under a common brand family. Hence, an article may be a part of a defined product series or range and is directly allocated to it.

For articles belonging to several series the statement can be provided several times.

| Content | Description | Structure |
|---------|---------------------------------------------------------------|-----------|
| Serie | Name of the product series the article in question belongs to | Text 80 |

3.9 Model number

The model number consists of a combination of digits and letters and serves to define a **precise version of an article**. For instance, the model series of an article may comprise several articles with different functions and different years of manufacture.

Articles for a product model that differ only in certain characteristics can be grouped by specifying the model number, e.g. for display in the web shop.

| Content | Description | Structure |
|---------|-------------------------------------------------|-----------|
| Modell | Model number assigned by the industrial company | Text 15 |

3.10 WELL label

The **WELL label** is a hitherto voluntary classification system used by the valve manufacturers that **classifies the energy consumption** (with a focus on warm water) **of fittings**. The WELL label is also used with flushing systems and accessories. The classification system can be compared to the energy label for electrical appliances; it differentiates between application in the public and the private sector. The WELL label may be stored as a complementary document with the article (cf. chapter 9.2.1).

3.11 Labelling of article accessories

Articles that are presented as accessories may be labelled accordingly.

| Content | Description | Structure |
|---------|---------------------------------------------------|-----------|
| Zubehör | Indication of whether the article is an accessory | Yes/No |

3.12 Article accessories

If one or more articles are available as **accessories to a product from the assortment** of the organization, they are allocated by means of the factory article number. All accessories listed need to be available in the assortment.

| Content | Description | Structure |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------|----------------|
| Zubehörartikel | Factory article number/trade article number of the accessory | String 15 |
| Menge | Number of accessories allocated to a product | Decimal number |
| Hersteller ID | Unambiguous identification of the manufacturer e.g. GLN | Text 13 |
| Hersteller ID Typ | Type of manufacturer ID e.g. • GLN (Code "gln") • Open data check (code "opendatacheck_shk") Duns (Code "duns") | Text 35 |

For the illustration of article accessories within the data provided by the wholesale trade for the trade, the typification of references is optionally possible. The typification is only relevant in the relationship between trade and craft trade and is not displayed via the ARGE systems. An industrial company cannot supply the type because it is not mapped in the corresponding interfaces and software systems.

Since many accessory articles may be assigned to a main article, it makes sense to subdivide them. This can be used to better display the accessory articles, e.g. in web shops. The subdivision can be done by using accessory groups. The individual accessory groups within the 'Groups' are defined with the group type 'ZG'. The assignment of the articles to the group is done via the article attributes. For more details, see chapter Accessory groups and article attributes.

3.13 Control indicators

Control indicators control the general display of an article on the appropriate platforms (e.g. *Building-Masterdata*).

For instance, the following **indicators control the display of an article in the shop or the spare parts system** of the portal, facilitating the placement of an order directly with the organization.

| Content | Description | Structure |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| Bestellfähigkeit unterdrücken | Control of the availability for order of an article in the ordering system. Please note: The service <Bestellung> (order) is another prerequisite in the rights structure of the <i>Building-Masterdata</i> for an article to become available for order. | Yes/No |
| Anzeige in | Control of the display of the article in the ordering- and spare parts system of the <i>Building-Masterdata</i> The mandatory values are defined in Annex 4 <i>Code lists</i> . | Value list |

3.14 Packaging disposal

The information LUCID number and disposal service provider is given for products subject to packaging disposal in the communication between wholesaler and tradesman at article level. In data provision by the industry, the information is transferred at header level.

| Content | Description | Structure |
|--------------------------|---------------------------------------|-----------|
| LUCID-Nummer | LUCID number | Text 20 |
| Entsorgungsdienstleister | Name of the disposal service provider | Text 40 |

3.15 Match code

Within the data provided by the wholesale trade for the craft trades, the match code is optional. The match code is only relevant in the relationship between retail and the skilled trades and is not displayed via the ARGE systems. An industrial enterprise cannot supply the match code because it is not mapped in the corresponding interfaces and software systems.

| Content | Description | Structure |
|-----------|-------------|-----------|
| Matchcode | Match code | Text 15 |

4 Product texts

As regards content, the texts to be provided that **describe precisely one article or a group of similar articles** can be short texts, long texts and dimension texts.

As an optional feature, additional product texts can be maintained for every article from the assortment. These text types give a comprehensive description of an HVAC industry product across all distribution levels. They provide advantages in the creation and use of texts and are optimized for involved processes.

In the medium term, the text types used to date (Chapters 4.2 thru 4.5) will be replaced by the short article description, the article description, the marketing text, and the usage instructions.

4.1 Requirements on character set and formatting

As regards **common product texts**, such as short text 1 and 2, long text and dimension text, the following requirements on the character set apply to all:

- Alphanumeric upper-case and lower-case characters with umlauts and blanks
- Permitted special characters are: ! , # \$ % & ' () * + , - . / : < = > ? @ ^ _ ` § ß

As regards **optional product texts**, such as short article description, article description, marketing text, and usage instructions, **extended requirements on the character set apply** referring to UNICODE:

- U0020 – U007F Latin Basic without control characters
- U00A0 – U00FF Latin-1 Supplement without control characters
- U0100 – U017F Latin Extended-A
- U0370 – U03FF Greek, Coptic
- U0400 – U04FF Cyrillic
- U20A0 – U20CF Currency symbols
- U2000 – U206F Punctuation
- U2200 – U22FF Mathematical characters
- U2300 Diameter symbols

The formatted continuous texts, such as article description, marketing text, and usage instructions, are in HTML mode. The following tags can be used:

| | |
|---------------------------|-------------------------|
| Paragraph, line break | <p>, |
| Bold, italics, underlined | , , <i>, <u> |
| Sorted and unsorted list | , , |
| Font sizes (headlines) | <h1>, <h2>, <h3>, <h4> |

In addition, line breaks (U000A and U000D) can be used.

4.2 Short text 1 and 2

The short text is needed for the description and identification of an article in the entire business process. This does not only apply to first-stage processing, but above all to further use of the short text without revision in downstream systems and e.g. in quotations or invoices.

It provides a **clear, legible, understandable** and **product-relevant limited description of an article**. The short text consists of 80 characters over two lines of 40 characters each. Due to this restriction, the **use of abbreviations according to the ARGE list of abbreviations is permitted**, with the primary objective of guaranteeing good legibility of the texts. The short text does not contain marketing aspects; duplicate texts are to be avoided.

Exception: In the case of spare parts, the article number may be included in the short text to ensure unambiguousness.

| Content | Description | Structure |
|------------|--------------------------------------------------------------------------------------------------------------------------|-----------|
| Kurztext 1 | 40 characters max.; observe attribute order | Text 40 |
| Kurztext 2 | 40 characters max., logical separation from short text 1 without continuous text or hyphenation; observe attribute order | Text 40 |

4.3 Attribute order of the short texts

The following attribute order is recommended if information can be provided on the attributes in question.

| | Text attribute | Comment | Examples ¹ |
|---|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| 1 | Hersteller | The manufacturer's name at the beginning of the short text is mandatory. The manufacturer is responsible for the presentation. If the manufacturer's name is abbreviated, this abbreviation must be used consistently. The manufacturer's name must be abbreviated using two letters; the abbreviations are not subject to the rules of the list of abbreviations. The directory of manufacturer's name abbreviations is kept by the ARGE, abbreviations are to be coordinated with the ARGE. | Friedrich Grohe => FG |
| 2 | Warenbezeichnung | The product description is to be given in the singular. It can be assigned by the supplier at their discretion. | Single lever washbasin tap |
| 3 | Serie | To be written in the manufacturer's own style. The adopted style is to be used consistently. | Europlus |
| 4 | Modellbezeichnung/ Modellnummer | There may be no line break in the model name/model number. For an unambiguous description of spare parts, the article number may be used in the short text. | 33155 |
| 5 | Eigenschaft | Technical particularities of the product are stated here. | Electronical |
| 6 | Maße | <u>Order of dimensions:</u> Sanitary – recommended: length x width x height Heating – recommended: height x width x length If dimensions are given in millimetres (mm), the unit can be omitted. With all dimensions that are not given in millimetres the unit must be provided. The decimal character is the comma, without blank. The character for inch is ". Mixed fractions are permitted. | DN15 |
| 7 | Erweiterte Eigenschaften | Indication of colour, surface, glass type, profile of the product or other features used for differentiation | Chrome |

¹ The examples are not coherent. They should each be seen as an example for a single text attribute only.

4.4 Long texts

Long texts describe articles in detail and represent **group texts in terms of content** that can generally be **assigned to a group of similar articles** (e.g. several products from one series). These texts are made available to the end customer too, in quotations or invoices. Long texts are no tender texts; they can at most be a part of such texts. 99 lines of 40 characters each are available for long text maintenance.

| Content | Description | Structure |
|----------------------|-----------------------------------------------|-----------|
| Langtext Nummer | Identification number | Text 8 |
| Langtextzeilennummer | Consecutive line number of the long text 1-99 | Integer 9 |
| Langtext | Text content: 40 characters max. per line | Text 40 |

Consequently, long texts are not maintained on the article. Reference to the related long text is made by means of an unambiguous identification number that is allocated to the article.

| Content | Description | Structure |
|----------------|-----------------------------------------------------------|-----------|
| Langtextnummer | Identification number, reference to the related long text | Text 8 |

4.5 Dimension texts

Dimension texts are a **product-specific complement**. 99 lines of 40 characters each are available for dimension text maintenance, e.g. to describe special **product features in detail** (extended short text) that do not apply to all products in the group.

| Content | Description | Structure |
|----------------------------|-----------------------------------------------|-----------|
| Dimensionstextzeilennummer | Consecutive line number of the long text 1-99 | Integer 2 |
| Dimensionstextzeile | Text content: 40 characters max. per line | Text 40 |

4.6 Short article description

The short article description is an **article-identifying, unambiguous description** of a product as unformatted continuous text. The requirements are similar to the requirements for short text 1 and 2. Analogous to short text 1 and 2, the exception rule for spare parts applies that the article number of spare parts may be included in the short description of the article to ensure its unambiguousness. Due to the higher number of usable characters, abbreviations are only used in exceptional cases. This text type is used in all commercial documents and in incoming-goods processes.

| Content | Description | Structure |
|-------------------------|-----------------------------------------------|-----------|
| Artikelkurzbeschreibung | Unformatted single-line short article summary | Text 256 |

4.7 Article description

The article description is a **comprehensive description of all technical features** of a product. It includes references to standards or safety instructions and information on components or mandatory accessories. The article summary is mainly intended for the user groups of specialized craftsmen and planners.

| Content | Description | Structure |
|---------------------|--------------------------------------------------------|------------|
| Artikelbeschreibung | Formatted product-related continuous text in HTML mode | Text 10000 |

4.8 Marketing text

The marketing text is a **user-oriented description of an article** as formatted continuous text. It is not intended to be exhaustive and does not generally provide technical details. This text type is for instance used when compiling price lists at the wholesaler's or in information offers directed at the specialized craftsman.

| Content | Description | Structure |
|------------------|-----------------------------------------------------------|------------|
| Vermarktungstext | Formatted marketing-oriented continuous text in HTML mode | Text 10000 |

4.9 Usage instructions

The usage instructions provide **advice on processing techniques that deviate from standard procedures** (e.g. reference to special tools). This text type is mainly intended for the user groups of wholesalers and specialized crafts businesses.

| Content | Description | Structure |
|--------------------|----------------------------------------------------------------|------------|
| Verwendungshinweis | Formatted continuous text with application advice in HTML mode | Text 10000 |

5 Attributes

Attributes are used to transmit the **extended characteristics and forms of an article**.

Through attributes various contents are mapped. These are:

- ETIM classification
- Keywords
- Assumption of Liability Agreement of the ZVSHK
- Allocation of fees to articles
- Allocation of accessory groups
- Regulations
 - Energy efficiency categories
 - UBA positive list
 - Hazardous goods
 - REACH attribute
 - Information on hazardous substances
 - Battery information
 - Attribute ECHA data base
 - Disposal
 - Explosive Substances Regulation
 - General Product Safety Regulation (GPSR)
 - Environmental Product Declaration (EPD)
 - Deforestation Regulation (EUDR)

Depending on the content different definitions apply for the fields being used. In the following, this is defined for the different contents.

Principally, the extended character set can be used within the attributes (see chapter 4.1 *Requirements on character set and formatting*).

Fields of the article attributes

| Content | Description | Structure |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------|------------|
| Attributsystem | Stating the attribute system that the attribute refers to The mandatory values are defined in Annex 4 <i>Code lists</i> . | Value list |
| Attributklasse | Allocation to an attribute class The mandatory values are defined in Annex 4 <i>Code lists</i> . | Text 60 |
| Attributname | Unambiguous name/characteristic of the attribute The mandatory values are defined in Annex 4 <i>Code lists</i> . | Text 60 |
| Attributwert | Value of the attribute | Text 256 |
| Attributwert 2 | Upper value of the attribute if it is an attribute of the RANGE type | Text 60 |
| Attributeinheit | Unit of the attribute | Text 60 |
| Attributwertbeschreibung | Complementary description of the attribute value | Text 60 |

5.1 ETIM classification

Using the attributes facilitates product classification in accordance with the ETIM classification model (Electrotechnical Information Model). Stating the ETIM class for the commodity groups agreed upon between ARGE, DGH and ZVSHK is required. For further information on ETIM please go to www.etim-international.com.

The transfer of several ETIM versions is basically possible and desired.

Each delivered ETIM version should cover the product range completely. Characteristics with imperial metrics may not be used, as they are not relevant for the German market. Data deliveries according to DQG 10 can be delivered until 30 Sep 2026 with ETIM 10 data.

Data deliveries according to DQG 11 can be delivered from 1 April 2026 with ETIM 10 and ETIM 11 data.

| Content | Description | Structure |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| Attributsystem | Unambiguous name of the system: ETIM version "ETIM 8", "ETIM 9", or "ETIM 10" The mandatory values are defined in Annex 4 <i>Code lists</i> . | Value list |
| Attributklasse | ETIM class ID according to the ETIM model | Text 60 |
| Attributname | Name of the attribute when using the ETIM feature ID according to the ETIM model | Text 60 |
| Attributwert | Value of the attribute; depending on the feature type in the ETIM model different information can be given <ul style="list-style-type: none"> • Feature type "selection" -> value ID according to ETIM model • Feature type "logical" -> "true" or "false" • Feature type "numerical" -> numerical value • Feature type "range" -> lower numerical value | Text 256 |
| Attributwert 2 | Upper numerical value of the feature type "range" | Text 60 |
| Attributeinheit | Is not used during the transfer, as the unit arises from the ETIM model. | Text 60 |
| Attributwertbeschreibung | Complementary description of some attribute values in plain text: e.g. colour indication "polar white", which is not subject to any DIN standard | Text 60 |

Example of ETIM classification: wash basin

| Factory article number | Attribute system | Attribute class | Attribute name | Attribute value | Attribute value2 | Attribute unit | Attribute value description |
|------------------------|------------------|-----------------|----------------|-----------------|------------------|----------------|-----------------------------|
| 4711 | ETIM 10 | EC011550 | EF002169 | EV000572 | | | |
| 4711 | ETIM 10 | EC011550 | EF001257 | EV000154 | | | |
| 4711 | ETIM 10 | EC011550 | EF000051 | EV000396 | | | |
| 4711 | ETIM 10 | EC011550 | EF000007 | EV000206 | | | dusty grey |
| 4711 | ETIM 10 | EC011550 | EF005645 | EV022149 | | | |
| 4711 | ETIM 10 | EC011550 | EF024897 | – | | | UN |
| ... | | | | | | | |
| 4711 | ETIM 11 | EC011550 | EF002169 | EV000572 | | | |
| 4711 | ETIM 11 | EC011550 | EF001257 | EV000154 | | | |
| 4711 | ETIM 11 | EC011550 | EF000051 | EV000396 | | | |
| 4711 | ETIM 11 | EC011550 | EF000007 | EV000206 | | | dusty grey |
| 4711 | ETIM 11 | EC011550 | EF005645 | EV022149 | | | |
| 4711 | ETIM 11 | EC011550 | EF024897 | – | | | UN |

When transferring ETIM, the Attribute Unit field is not used because the unit is defined by the model. The field Attribute Value 2 may only be used for characteristics of type Range. No entry may be made for characteristics of type Logical, Selection and Numeric. The Attribute Value Description field may only be used in two application cases to specify the colour more precisely.

1. More precise specification of colours

Example: Attribute name: EF00007 (colour), attribute value1: EV000270 (grey);
attribute value description “dusty grey”

2. The reason why an attribute value was indicated with a dash:

NA – Not applicable (this characteristic does not apply to this product in the context of the class)

MV – Missing Value (an alphanumeric characteristic is relevant, but there is no correct value in this ETIM version)

UN – Unknown (currently it is not possible for the data provider to provide a specific value, but in general it would be possible)

3. The provision of features being filled with “dash” is not mandatory. If the feature is not applicable to this article, this should be made with the description “NA – Not applicable”.

Display of articles for which no ETIM class exists.

For articles for which no ETIM class exists, the specification ‘EC000000’ can be used as the class.

| Factory article number | Attribute system | Attribute class | Attribute name | Attribute value | Attribute value2 | Attribute unit | Attribute value description |
|------------------------|------------------|-----------------|----------------|-----------------|------------------|----------------|-----------------------------|
| 4712 | | EC000000 | | | | | |

5.2 Keywords

Keywords (also search terms, synonyms) are generally understood to be nouns of central importance that enable statements to be made about the content of a text. Keywords are short, concise terms commonly used in the industry as an alternative to the short description. They make it easier to search for products in electronic systems. They are **transmitted within the attributes**, specifying the **attribute system “INDIV”**. The attribute name must be “keyword”. Several keywords can be specified for each article.

Example for keywords: tray base

| Factory article number | Attribute system | Attribute class | Attribute name | Attribute value | Attribute value2 | Attribute unit | Attribute value description |
|------------------------|------------------|-----------------|----------------|-----------------|------------------|----------------|-----------------------------|
| 1 | INDIV | | Keyword | Tray base | | | |

The mandatory value for the attribute name is defined in Annex 4 *Code lists*.

The specifications “Attribute class”, “Attribute value2”, “Attribute unit” and “Attribute value description” may not be stated.

5.3 Assumption of Liability Agreement of the ZVSHK

The Assumption of Liability Agreement (HÜV for short) is a contract between a manufacturer (accredited partner) and the ZVSHK in favour of the HVAC member companies (Art. 328 BGB/German Civil Code). If the manufacturer’s product causes a defect for the member company’s customer (principal), the member company shall be entitled to claim damages against the manufacturer of the product. However, the principal’s claim for defects only exists if the material/device/system was already defective at the time of acceptance under the contract for work (source: ZVSHK Assumption of Liability Agreement, February 2016 edition).

Transmission occurs within the Attributes, stating the attribute system <ZVSHK> and the attribute name “Haftungsübernahmevereinbarung” [Assumption of Liability Agreement]. Possible values: Yes, No, Not specified.

Example Assumption of Liability Agreement: Yes

| Factory article number | Attribute system | Attribute class | Attribute name | Attribute value | Attribute value2 | Attribute unit | Attribute value description |
|------------------------|------------------|-----------------|-------------------------------|-----------------|------------------|----------------|-----------------------------|
| 1 | ZVSHK | | Haftungsübernahmevereinbarung | Yes | | | |

The mandatory value for the attribute name and the attribute value is defined in Annex 4 *Code lists*.

The specifications “Attribute class”, “Attribute value2”, “Attribute unit” and “Attribute value description” may not be stated.

5.4 Allocation of fees to articles (calibration fees)

A separate article type is available for displaying calibration fees for articles such as water meters. The fee is specified via this article. The assignment of which 'fee article' belongs to an article is made by specifying it as a detail on the article.

The mapping is done within the attributes, specifying the attribute system "Gebühren" (fees). The attribute name must be specified as "Eichgebühren" (calibration fees). The article number of the fee is specified as the attribute value.

Example:

Specification of the allocation of the fee article (GEB-4711) as calibration fee to the article "Wasseruhr" (water meter) (4715).

| Factory article number | Attribute system | Attribute class | Attribute name | Attribute value | Attribute value2 | Attribute unit | Attribute value description |
|------------------------|------------------|-----------------|----------------|-----------------|------------------|----------------|-----------------------------|
| 4715 | Gebühren | | Eichgebühren | GEB-4711 | | | |

The mandatory value for the attribute name is defined in Annex 4 *Code lists*.

The specifications "Attribute class", "Attribute value2", "Attribute unit" and "Attribute value description" may not be stated.

5.5 Allocation of accessory groups

Accessories can be allocated to accessory groups for categorisation purposes. The groups are defined using the group system with the group type "Zubehörgruppe" (accessory group) (ZG).

Mapping is done within the attributes, stating the '**Accessories**' attribute system. The attribute name "Zubehörgruppe" must be stated. The group ID is stated as attribute value. Optionally, the sorting sequence can be stated in attribute value 2.

Example:

Specification of the allocation of the article (4717) to the accessory group (ZG 1) with the sorting sequence (1).

| Factory article number | Attribute system | Attribute class | Attribute name | Attribute value | Attribute value2 | Attribute unit | Attribute value description |
|------------------------|------------------|-----------------|----------------|-----------------|------------------|----------------|-----------------------------|
| 4717 | Zubehör | | Zubehörgruppe | ZG 1 | 1 | | |

The mandatory value for the attribute name is defined in Annex 4 *Code lists*.

The specifications "Attribute class", "Attribute unit" and "Attribute value description" may not be stated.

5.6 Regulations

The contents relating to regulations are transferred to a common attribute system called “Regulations”. The individual regulations/areas are differentiated using the attribute class.

The following classes are used:

| | | |
|--------------------------------------------|----|-----------------------------|
| • Energy efficiency classes | -> | “ERP” |
| • UBA positive list | -> | “UBA-Positivliste” |
| • Hazardous goods | -> | “Gefahrgut” |
| • REACH label | -> | “REACH” |
| • Information on hazardous substances | -> | “Gefahrstoff” |
| • Battery information | -> | “Batteriekennzeichnung” |
| • ECHA data base (SCIP) label | -> | “ECHA-DB” |
| • Disposal | -> | “Entsorgung” |
| • Explosive substances regulation | -> | “Explosionsstoffverordnung” |
| • General Product Safety Regulation (GPSR) | -> | “GPSR” |
| • Environmental Product Declaration (EPD) | -> | “EPD” |

The mandatory values for the respective attribute system are defined in Annex 4 *Code lists*.

5.6.1 Energy efficiency classes

Energy efficiency is a measure of the amount of energy used to achieve a defined benefit from products. The labelling of the energy consumption of different products serves to support the purchase decision. It provides information about the energy efficiency during use (economic principle). A well-known example is the EU energy label for electrical appliances.

The following areas have been defined with the corresponding regulations. However, not all energy efficiency classes, e.g. for circulation pumps or fans, have been defined yet.

Sector: Boilers and combi-boilers (gas/oil/electric)

Regulation: Commission Regulation (EU) No 813/2013, Commission Regulation (EU) No 811/2013

| Energy efficiency class description | Abbreviation / Attribute name |
|-----------------------------------------------------------------------------------------------|----------------------------------------------|
| Class for seasonal space heating energy efficiency | jahresz. bed. Raumheizung |
| Class for seasonal space heating energy efficiency in medium-temperature applications (55 °C) | jahresz. bed. Raumheizung mitteltemp. 55C |
| Class for seasonal space heating energy efficiency in low-temperature applications (35 °C) | jahresz. bed. Raumheizung niedertemp. 35C |

| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| Class for water heating energy efficiency | Warmwasseraufbereitung |
| Class for seasonal space heating energy efficiency of the compound system consisting of room heater, temperature controller and solar device | jahresz. bed. Raumheizung Verbundanlage |
| Class for seasonal space heating energy efficiency of the compound system consisting of combination heater, temperature controller and solar device | jahresz. bed. Kombiheizung Verbundanlage |
| Class for water heating energy efficiency of the compound system consisting of combination heater, temperature controller and solar device | Warmwasseraufbereitung Verbundanlage |

Sector: Water heater (gas/oil/electric)

Regulation: Commission Regulation (EU) No 814/2013, Commission Regulation (EU) No 812/2013

| Energy efficiency class description | Abbreviation / Attribute name |
|-----------------------------------------------|-------------------------------|
| Class for water heating energy efficiency | Warmwasseraufbereitung |
| Energy efficiency class of the hot water tank | Warmwasserspeicher |

Sector: Air conditioning and ventilation technology in households

Regulation: Commission Regulation (EU) No 206/2012, Commission Regulation (EU) No 626/2011

| Energy efficiency class description | Abbreviation / Attribute name |
|-----------------------------------------------------------|-------------------------------|
| Class for energy efficiency – cooling | Kühlung |
| Class for energy efficiency – heating colder climate zone | Heizung kältere Klimazone |
| Class for energy efficiency – heating medium climate zone | Heizung mittlere Klimazone |
| Class for energy efficiency – heating warmer climate zone | Heizung wärmere Klimazone |

Sector: Circulating pumps

Regulation: Commission Regulation (EC) No 641/2009

| Energy efficiency class description | Abbreviation / Attribute name |
|---------------------------------------------------|-------------------------------|
| Not yet defined, possibly energy efficiency index | |

Sector: Fans

Regulation: Commission Regulation (EU) No 327/2011

| Energy efficiency class description | Abbreviation / Attribute name |
|-------------------------------------|-------------------------------|
| Not yet defined | |

Sector: Water pumps

Regulation: Commission Regulation (EU) No 547/2012

| Energy efficiency class description | Abbreviation / Attribute name |
|-------------------------------------|-------------------------------|
| Not yet defined | |

Sector: Solid fuel boilers

Regulation: Commission Regulation (EU) No 2015/1189, Commission Regulation (EU) No 2015/1187

| Energy efficiency class description | Abbreviation / Attribute name |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| Energy efficiency class of the solid fuel boiler | Festbrennstoffkessel |
| Energy efficiency class of the compound system consisting of a solid fuel boiler, auxiliary heating equipment, temperature controller and solar equipment | Festbrennstoffe Verbundanlage |

Sector: Household lighting, general lighting

Regulation: Commission Regulation (EC) No 244/2009, Commission Regulation (EU) No 1194/2012, Commission Regulation (EU) No 874/2012, Commission Regulation (EU) No 2019/2015

| Energy efficiency class description | Abbreviation / Attribute name |
|-----------------------------------------------------|-------------------------------|
| Energy efficiency class of the lamp | Lampe |
| Energy efficiency class chandelier approved from/to | Leuchter genehmigt von/bis |
| Energy efficiency class LED from/to | LED von/bis |
| Energy efficiency class of the illuminant | Leuchtmittel |

Sector: Individual room heaters

Regulation: Commission Regulation (EU) No 2015/1188, Commission Regulation (EU) No 2015/1185, Commission Regulation (EU) No 2015/1186

| Energy efficiency class description | Abbreviation / Attribute name |
|-------------------------------------------------------|-------------------------------|
| Energy efficiency class of the individual room heater | Einzelraumheizgerät |

Sector: Hot-air central heating (without CHP)

Regulation: Commission Regulation (EU) No 2016/2281

| Energy efficiency class description | Abbreviation / Attribute name |
|-------------------------------------|-------------------------------|
| Not yet defined | |

Sector: Air conditioning, ventilation technology

Regulation: Commission Regulation (EU) No 1253/2014, Commission Regulation (EU) No 1254/2014

| Energy efficiency class description | Abbreviation / Attribute name |
|----------------------------------------------------------------|-------------------------------|
| Energy efficiency class of the bi-directional ventilation unit | Zwei-Richtung-Lüftungsgerät |

The mapping of the energy efficiency classes is made by the attribute system “Regulations” (Code “Regulations”) and the attribute class “ERP”.

In addition to the energy efficiency classes, the EPREL registration number for the product can be specified.

| Content | Description | Attribute name | Repetition | Structure |
|-------------------------------|-----------------------------------------------------------------------------|----------------------------------------------------------------|------------|----------------------------------------------|
| Energy efficiency class | Indication of the energy efficiency class in accordance with the regulation | The attribute name is derived from the individual regulations. | manifold | Value list in accordance with the regulation |
| EPREL registration identifier | Registration identifier in the EPREL database | EPREL registration identifier | onefold | Text |

Products that are integrated into different systems must be assigned to different energy efficiency classes depending on the application:

| Factory article number | Attribute system | Attribute class | Attribute name | Attribute value | Attribute value2 | Attribute unit | Attribute value description |
|------------------------|------------------|-----------------|------------------------------------------------|-----------------|------------------|----------------|-----------------------------|
| 4711 | Regulations | ERP | EEK LED von/bis | A+ | A+++ | | |
| 4712 | Regulations | ERP | EEK Einzelraumheizgerät | A+ | | | |
| 4713 | Regulations | ERP | EEK jahresz. bed. Raumheizung | A | | | |
| 4713 | Regulations | ERP | EEK jahresz. bed. Raumheizung mitteltemp. 55°C | B | | | |
| 4713 | Regulations | ERP | EEK jahresz. bed. Raumheizung niedertemp. 35°C | A++ | | | |
| 4713 | Regulations | ERP | EEK Warmwasseraufbereitung | A | | | |
| | | | | | | | |
| 4713 | Regulations | ERP | EPREL-Registrierungsnummer | 1234567890 | | | |

The mandatory values for the attribute system, the attribute class, the attribute name and the attribute value are defined in Annex 4 *Code lists*.

The specifications “Attribute unit” and “Attribute value description” may not be stated. Attribute value 2 may only be stated for the energy efficiency classes “Leuchter genehmigt von/bis” and “LED von/bis”.

Depending on the regulation, more than one energy efficiency class can be provided for an article.

Example “Combined heater”:

- Class for the seasonally induced space heating energy efficiency
- Class for the water heating energy efficiency
- Class for the seasonally induced space heating energy efficiency of the compound system consisting of the space heater, temperature regulator and solar unit

5.6.2 UBA positive list

The **Positive List** issued by the Federal Environment Agency (UBA) **refers to metallic materials** used to manufacture products that get in contact with drinking water.

Every article requires a general statement as to whether it is subject to the Positive List. If so, an additional statement is required as to whether the requirements of the Positive List are fulfilled. Supplementary documents may be stored for articles that are both subject to the Positive List and fulfil its requirements (cf. chapter 9.2.1).

| Content | Description | Attribute name | Repetition | Structure |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|------------|-----------|
| Kennzeichen UBA-Positivliste | Indication of whether the article is subject to the UBA Positive List. “true” -> The article is subject to the UBA Positive List. “false” -> The article is not subject to the UBA Positive List. | Kennzeichen UBA- Positivliste | onefold | Yes/No |
| Kennzeichen UBA-Anforderung | Indication of whether the article fulfils the requirements of the UBA Positive List. “true” -> The article fulfils the requirements of the UBA Positive List. “false” -> The article does not fulfil the requirements of the UBA Positive List. | Kennzeichen UBA- Anforderung | onefold | Yes/No |

The mapping of the specifications is made in the article attributes within the attribute system “Regulations” (Code “**Regulations**”) and the attribute class “**UBA-Positivliste**”.

| Factory article number | Attribute system | Attribute class | Attribute name | Attribute value | Attribute value2 | Attribute unit | Attribute value description |
|------------------------|------------------|------------------|------------------------------|-----------------|------------------|----------------|-----------------------------|
| 4711 | Regulations | UBA-Positivliste | Kennzeichen UBA-Positivliste | false | | | |
| ... | | | | | | | |
| 4712 | Regulations | UBA-Positivliste | Kennzeichen UBA-Positivliste | true | | | |
| 4712 | Regulations | UBA-Positivliste | Kennzeichen UBA-Anforderung | true | | | |
| ... | | | | | | | |
| 4713 | Regulations | UBA-Positivliste | Kennzeichen UBA-Positivliste | true | | | |
| 4713 | Regulations | UBA-Positivliste | Kennzeichen UBA-Anforderung | false | | | |

The mandatory values for the attribute system, the attribute class, the attribute name and the attribute value are defined in Annex 4 *Code lists*.

The specifications “Attribute value2”, “Attribute unit” and “Attribute value description” may not be stated.

5.6.3 Hazardous goods (transport ADR)

If an article is classified as hazardous goods, information regarding the UN number, hazard class and transport category is usually required. In the field of the so-called mixed products, hazardous goods may be stated without further additional information.

| Content | Description | Attribute name | Repetition | Structure |
|--------------------------------|---------------------------------------------------------------------------------------------------|--------------------------------|------------|----------------|
| Kennzeichen Gefahrgut | Labelling required if the article is hazardous goods | Kennzeichen | onefold | Yes/No |
| UN-Nummer | Article number of the hazardous goods | UN-Nummer | manyfold | Text 35 |
| Kemlerzahl | Hazard identification number indicating the primary and subsidiary hazard | Kemlerzahl | onefold | Text 256 |
| Gefahrenklasse | Indication of a hazard class: classification in hazard categories | Gefahrenklasse | manyfold | Text 35 |
| Beförderungskategorie | Important information regarding the transportation of the article | Beförderungskategorie | onefold | Value list |
| Offizielle Benennung | Official designation according to the specification in the material safety data sheet | Offizielle Benennung | onefold | Text 256 |
| Technische Benennung | Technical designation according to the specification in the material safety data sheet | Technische Benennung | onefold | Text 256 |
| Gefahrenzettel | Hazard label according to the specification in the material safety data sheet | Gefahrenzettel | onefold | Text 256 |
| Verpackungsgruppe | Packaging group according to the specification in the material safety data sheet | Verpackungsgruppe | onefold | Text 256 |
| Anzahl der Versandstücke | Number of the shipped items according to the specification in the material safety data sheet | Anzahl der Versandstücke | onefold | Text 256 |
| Beschreibung der Versandstücke | Description of the shipped items according to the specification in the material safety data sheet | Beschreibung der Versandstücke | onefold | Text 256 |
| Tunnelbeschränkungscode | Tunnel restriction code according to the specification in the material safety data sheet | Tunnelbeschränkungscode | onefold | Text 256 |
| Wassergefahrgutklasse | Water dangerous good class according to the specification in the material safety data sheet | Wassergefahrgutklasse | onefold | String 256 |
| Begrenzte Menge | Restricted amount according to the specification in the material safety data sheet | Begrenzte Menge | onefold | Text 256 |
| Batteriegewicht | Indication of battery weight in kilograms for batteries with a nominal energy exceeding 100 Wh | Batteriegewicht | onefold | Numerical 18,3 |

The mapping of the specifications is made in the article attributes within the attribute system “Regulations” (Code “**Regulations**”) and the attribute class “**Gefahrgut**”.

| Factory article number | Attribute system | Attribute class | Attribute name | Attribute value | Attribute value2 | Attribute unit | Attribute value description |
|------------------------|------------------|-----------------|-----------------------|-----------------|------------------|----------------|-----------------------------|
| 4711 | Regulations | Gefahrgut | Kennzeichen | true | | | |
| 4711 | Regulations | Gefahrgut | Kennzeichen UN-Nummer | | | | |
| 4711 | Regulations | Gefahrgut | Gefahrenklasse | | | | |
| 4711 | Regulations | Gefahrgut | Beförderungskategorie | | | | |

The mandatory values for the attribute system, the attribute class, the attribute name and the attribute value are defined in Annex 4 *Code lists*. The specifications “Attribute value2”, “Attribute unit” and “Attribute value description” may not be stated.

In the case that an article has several safety data sheets, the structured data does not need to be specified, as the context of the data for the individual safety data sheet cannot be specified.

5.6.4 REACH regulation

Articles and ingredients of articles that are listed as substances of very high concern under [REACH](#) must be labelled in the data delivery. Regulation (EC) No 1907/2006 (REACH Regulation) is an EU chemicals regulation that came into force on 1 June 2007. REACH stands for the **R**egistration, **E**valuation, **A**uthorisation and **R**estriction of **C**hemicals. As an EU regulation, [REACH](#) is equally and directly applicable in all member states.

| Content | Description | Attribute name | Repetition | Structure |
|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------|------------|
| Kennzeichen REACH | Labelling is required if an article or ingredient of an article (chemical) is subject to the REACH regulation as a substance of very high concern. Possible values are: “true” -> The article has been checked and is subject of the list. The statement of the date and the SHVC substance must be made. “false” -> The article has been checked and is not subject of the list. The statement of the date must be made. “no data” -> The statement of the date is not required. | Kennzeichen | onfold | Code list |
| Datum der letzten Überprüfung der REACH-Liste | Date of completion of the verification that an article is on the REACH list. | Datum | onfold | String 35 |
| SVHC-Name | Statement of the SHVC substance, why the article has been classified as REACH relevant. In the attribute description the CAS number can be stated additionally. | SVHC-Name | manifold | String 256 |

The mapping of the specifications is made in the article attributes within the attribute system “Regulations” (Code “**Regulations**”) and the attribute class “**REACH**”.

| Factory article number | Attribute system | Attribute class | Attribute name | Attribute value | Attribute value2 | Attribute unit | Attribute value description |
|------------------------|------------------|-----------------|----------------|-----------------|------------------|----------------|-----------------------------|
| 4711 | Regulations | REACH | Kennzeichen | true | | | |
| 4711 | Regulations | REACH | Datum | 20201131 | | | |
| 4711 | Regulations | REACH | SVHC-Name | Blei | | | 20837-86-9 |

The mandatory values for the attribute system, the attribute class, the attribute name and the attribute value are defined in Annex 4 *Code lists*. The specifications “Attribute value2” and “Attribute unit” may not be stated. The information “Attribute value description” may only be used with the “SVHC Name” attribute and is used to optionally specify the CAS name.

5.6.5 Information on hazardous substances

If an article is classified as a hazardous substance in the sense of substances and mixtures (“CLP Regulation”), this article must be labelled accordingly. In addition, relevant information must be provided for the processes in a structured manner in line with the Material Safety Data Sheet. Furthermore, the provision of a safety data sheet is required as part of the documents.

| Content | Description | Attribute name | Repetition | Structure |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|------------|-------------------------------|
| Kennzeichen Gefahrstoff | Indicates whether the article is a hazardous substance | Kennzeichen | onefold | Yes/No |
| Handelsname | Trade name of the dangerous substance (Section 1.1 in the Safety Data Sheet) | Handelsname | onefold | String 256 |
| Ergänzende Informationen | Supplementary information on the hazardous substance | Ergänzende Informationen | onefold | String 256 |
| Signalwort Achtung | Indicates whether the signal word “Achtung”/“Attention” must be specified. (Section 2.2 in the Safety Data Sheet) | Signalwort Achtung | onefold | Yes/No |
| Signalwort Gefahr | Indicates whether the signal word “Gefahr”/“Danger” must be specified. (Section 2.2 in the Safety Data Sheet) | Signalwort Gefahr | onefold | Yes/No |
| Lagerklasse | Storage class (Section 7.2 or Section 15 of the Safety Data Sheet) | Lagerklasse | onefold | Value list Storage classes |
| Kennzeichen nur gewerblich | Indicator: “commercial only” | Kennzeichen nur gewerblich | onefold | Yes/No |
| GHS-Gefahrenpiktogramm | Specification of the hazard pictograms relevant to the article (Section 2.2 in the Safety Data Sheet) Several specifications can be transferred per article. | GHS-Gefahrenpiktogramm | manyfold | Value list |
| Gefahrenhinweis | Hazard statements / H statements incl. EUH statements (Sections 2.1 and 2.2 in the Safety Data Sheet) Several specifications can be transferred per article. | Gefahrenhinweis | manyfold | Value list |
| Sicherheitshinweis | Precautionary statements / P statements (Sections 2.1 and 2.2 in the Safety Data Sheet) Several specifications can be transferred per article. | Sicherheitshinweis | manyfold | Value list |

The mapping of the specifications is made in the article attributes within the attribute system “Regulations” (Code “**Regulations**”) and the attribute class “**Gefahrstoff**”.

The mandatory values for the attribute system, the attribute class, the attribute name and the attribute value are defined in Annex 4 *Code lists*. The specifications “Attribute class”, “Attribute unit” and “Attribute value description” may not be stated.

Example of hazardous substance information in the attributes:

| Factory article number | Attribute system | Attribute class | Attribute name | Attribute value | Attribute value2 | Attribute unit | Attribute value description |
|------------------------|------------------|-----------------|-------------------------------|-----------------|------------------|----------------|-----------------------------|
| 4711 | Regulations | Gefahrstoff | Indication | true | | | |
| 4711 | Regulations | Gefahrstoff | Trade name | | | | |
| 4711 | Regulations | Gefahrstoff | Supplementary information | | | | |
| 4711 | Regulations | Gefahrstoff | Signal word Achtung/Attention | Yes | | | |
| 4711 | Regulations | Gefahrstoff | Signal word Gefahr/Danger | Yes | | | |
| 4711 | Regulations | Gefahrstoff | Storage class | 8A | | | |
| 4711 | Regulations | Gefahrstoff | Indicator Commercial only | No | | | |
| 4711 | Regulations | Gefahrstoff | GHS hazard pictogram | GHS02 | | | |
| 4711 | Regulations | Gefahrstoff | GHS hazard pictogram | GHS02 | | | |
| 4711 | Regulations | Gefahrstoff | Hazard statement | H226 | | | |
| 4711 | Regulations | Gefahrstoff | Hazard statement | H318 | | | |
| 4711 | Regulations | Gefahrstoff | Precautionary statement | P210 | | | |
| 4711 | Regulations | Gefahrstoff | Precautionary statement | P211 | | | |

The mandatory values for the attribute system, the attribute class, the attribute name and the attribute value are defined in Annex 4 *Code lists*.

5.6.6 Battery information

As from 1 January 2020, for lithium batteries and products incorporating them, the summary of the results of the required tests shall be made available to any natural or legal person in the supply chain.

Proof must be provided in the form of the standardized UN 38.3 report of the United Nations. The legislation here already covers products manufactured after 30 June 2003.

The building services sector also has corresponding products, such as electronic fittings with batteries, cosmetic mirrors with rechargeable batteries or pressing tools with rechargeable batteries. The necessary information could not be determined so far.

Articles that contain lithium batteries and are subject to mandatory labelling in accordance with the currently valid ADR must be labelled accordingly (Kennzeichen “Lithiumbatterie” (lithium battery label)). For articles with labelling, the additional document <UN 38.3 Report> must be assigned to the article and transferred.

Furthermore, it must be indicated whether the article is labelled accordingly on dispatch (battery pictogram).

| Content | Description | Attribute name | Repetition | Structure |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------|------------|
| Kennzeichen Lithiumbatterie | Indicates whether this article requires a <UN 38.3 Report> test report. | Kennzeichen | onefold | Yes/No |
| Batteriepiktogramm | Indication whether and which labelling is required. Possible values are: <ul style="list-style-type: none"> • Yes, UN 3480 • Yes, UN 3481 • Yes, UN 3091 • Yes, UN 3090 • No | Batterie-piktogramm | onefold | Value list |

The mapping of the specifications is made in the article attributes within the attribute system “Regulations” (Code “**Regulations**”) and the attribute class “**Batteriekennzeichnung**”.

| Factory article number | Attribute system | Attribute class | Attribute name | Attribute value | Attribute value2 | Attribute unit | Attribute value description |
|------------------------|------------------|------------------------|-------------------|-----------------|------------------|----------------|-----------------------------|
| 4711 | Regulations | Batterie-kennzeichnung | | | | | |
| 4711 | Regulations | Batterie-kennzeichnung | Battery pictogram | Yes, UN 3481 | | | |

The mandatory values for the attribute system, the attribute class, the attribute name and the attribute value are defined in Annex 4 *Code lists*.

5.6.7 Indication ECHA data base

Since 1 January 2021, articles must be registered in the ECHA data base. The label indicates whether the article is stored in the data base.

| Content | Description | Attribute name | Repetition | Structure |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------|-----------|
| Kennzeichen ECHA Datenbank | Indication whether the article is stored in the ECHA data base. “true” -> stored in the ECHA data base. The SCIP number must be specified. “false” -> Not stored in the ECHA data base. The SCIP number does not need to be specified. “no data” -> The article is currently being listed in the ECHA DB, or this is currently being clarified by the manufacturer. The SCIP number does not need to be specified. | Kennzeichen | onefold | Code list |
| SCIP Nummer | SCIP number that has been allocated by the “provider of the data” during the registration. The number serves for the simplified report by the wholesaler. | SCIP-Nummer | onefold | Text 36 |

The mapping of the specifications is made in the article attributes within the attribute system “Regulations” (Code “**Regulations**”) and the attribute class “**ECHA-DB**”.

Example ECHA data base within the attributes:

| Factory article number | Attribute system | Attribute class | Attribute name | Attribute value | Attribute value2 | Attribute unit | Attribute value description |
|------------------------|------------------|-----------------|----------------|-------------------------------------|------------------|----------------|-----------------------------|
| 4711 | Regulations | ECHA-DB | Kennzeichen | false | | | |
| 4711 | Regulations | ECHA-DB | SCIP-Number | e991422-239c-4b49-8a42-3f4730aa51a0 | | | |

The mandatory values for the attribute system, the attribute class, the attribute name and the attribute value are defined in Annex 4 *Code lists*.

The specifications “Attribute value2”, “Attribute unit” and “Attribute value description” may not be stated.

5.6.8 Disposal / WEEE registration number

The WEEE registration number is given for products that are subject to electrical disposal.

| Content | Description | Repetition | Structure |
|---------------------------|--------------------------|------------|-----------|
| WEEE-Registrierungsnummer | WEEE registration number | onefold | Text 40 |

The mapping of the specifications is made in the article attributes within the attribute system “Regulations” (Code “**Regulations**”) and the attribute class “**Entsorgung**”.

Example disposal within the attributes:

| Factory article number | Attribute system | Attribute class | Attribute name | Attribute value | Attribute value2 | Attribute unit | Attribute value description |
|------------------------|------------------|-----------------|---------------------------|-----------------|------------------|----------------|-----------------------------|
| 4711 | Regulations | Entsorgung | WEEE-Registrierungsnummer | ABC1234 | | | |

The mandatory values for the attribute system, the attribute class, the attribute name and the attribute value are defined in Annex 4 *Code lists*.

The specifications “Attribute value2”, “Attribute unit” and “Attribute value description” may not be stated.

5.6.9 Explosive Substances Regulation

The specifications are given for products that are subject to the Explosive Substances Regulation.

| Content | Description | Repetition | Structure |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|
| Klasse | Specification of the class according to the Explosive Substances Regulation Possible values are: <ul style="list-style-type: none"> I for class I according to Annex I to the Regulation II for class II according to Annex I to the Regulation | onefold | Value list |

The mapping of the specifications is made in the article attributes within the attribute system “Regulations” (Code “**Regulations**”) and the attribute class “**Explosionsstoffverordnung**”.

In the attribute description the CAS number can be stated.

Example explosive substances regulation within the attributes:

| Factory article number | Attribute system | Attribute class | Attribute name | Attribute value | Attribute value2 | Attribute unit | Attribute value description |
|------------------------|------------------|---------------------------|----------------|-----------------|------------------|----------------|-----------------------------|
| 4711 | Regulations | Explosionsstoffverordnung | Klasse | I | | | CAS number |

The mandatory values for the attribute system, the attribute class, the attribute name and the attribute value are defined in Annex 4 *Code lists*.

The specifications “Attribute value2” and “Attribute unit” may not be stated.

5.6.10 General Product Safety Regulation (GPSR)

The information is provided for products that deviate from the manufacturer’s specifications, which are stated in the header data, in accordance with the GPSR.

| Content | Description | Repetition | Structure |
|-----------------------|-------------------------------------------------------------------|------------|-----------|
| Postadresse | Manufacturer’s street address | onfold | Text 256 |
| Elektronische Adresse | An email address or a link to a contact form for the manufacturer | onfold | Text 256 |

The mapping of the specifications is made in the article attributes within the attribute system “Regulations” (Code “**Regulations**”) and the attribute class “**GPSR**”.

Example General Product Safety Regulation within the attributes:

| Factory article number | Attribute system | Attribute class | Attribute name | Attribute value | Attribute value2 | Attribute unit | Attribute value description |
|------------------------|------------------|-----------------|----------------------|----------------------------------------------|------------------|----------------|-----------------------------|
| 4711 | Regulations | GPSR | Postadresse | Manufacturer Any Street 12345 Any City | | | |
| 4711 | Regulations | GPSR | ElektronischeAdresse | info@manufacturer.de | | | |

The mandatory values for the attribute system, attribute class, and attribute name are defined in Annex 4 *Code lists*.

“Attribute value2”, “Attribute unit”, and “Attribute value description” may not be stated.

5.6.11 Environmental Product Declaration

The specifications are given for products that are accompanied by an Environmental Product Declaration (EPD).

| Content | Description | Repetition | Structure |
|--------------------|------------------------------|------------|-----------|
| Deklarationsnummer | Number of the respective EDP | onfold | Text 256 |

The information is mapped in the article attributes in the ‘Regulations’ attribute system (code ‘**Regulations**’) and the ‘**EPD**’ attribute class.

Example Environmental Product Declaration within the attributes:

| Factory article number | Attribute system | Attribute class | Attribute name | Attribute value | Attribute value2 | Attribute unit | Attribute value description |
|------------------------|------------------|-----------------|--------------------|----------------------------------|------------------|----------------|-----------------------------|
| 4711 | Regulations | EPD | Deklarationsnummer | EPD-ASD- 12345678- ICC1-EN | | | |

The mandatory values for the attribute system, attribute class, and attribute name are defined in Annex 4 *Code lists*.

“Attribute value2”, “Attribute unit”, and “Attribute value description” may not be stated.

5.6.12 Deforestation Regulation (EUDR)

The specifications are given for products that are subject to the Deforestation Regulation (EUDR).

| Content | Description | Repetition | Structure |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|
| Kennzeichen | Indicates whether the article is subject to the Deforestation Regulation and has been produced in compliance with the regulation. Possible values are: - true | onefold | Value list |

The information is mapped in the article attributes in the 'Regulations' attribute system (code '**Regulations**') and the '**EUDR**' attribute class.

Example Deforestation Regulation within the attributes:

| Factory article number | Attribute system | Attribute class | Attribute name | Attribute value | Attribute value2 | Attribute unit | Attribute value description |
|------------------------|------------------|-----------------|----------------|-----------------|------------------|----------------|-----------------------------|
| 4711 | Regulations | EUDR | Kennzeichen | true | | | |

The mandatory values for the attribute system, attribute class, and attribute name are defined in Annex 4 *Code lists*.

"Attribute value2", "Attribute unit", and "Attribute value description" may not be stated.

6 Prices

The following price types have been defined for articles and can be stated:

- **Factory list price:** sales price ex works (industry). A factory list price must be provided as soon as it is also available in other publications issued by the industrial company.
In the event that raw material information (surcharges) is provided for an article, the factory list price includes this at the specified raw material prices.
- **RRP without tax:** Recommended non-binding resale price to the end customer
- **Retail list price:** This price is only relevant in the relationship between trade and crafts and is not displayed in the ARGE systems. An industrial company cannot provide this price to or through the systems of the ARGE because it will not be displayed in the relevant interfaces and software systems.

As a rule, price information is transmitted exclusive of VAT. Any selected price type requires indication of the relevant detailed information such as price value, currency, price basis, and price quantity unit.

| Content | Description | Structure |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Preiswert | Price information according to different price types | Decimal number |
| Währung | Currency of the price value The mandatory values are defined in Annex 4 <i>Code lists</i> . | Value list |
| Preisbasis | Quantity of the article the price refers to; possible values are 1, 10, 100, and 1000 | Integer 9 |
| Preismengeneinheit | Quantity unit of the article the price refers to, e.g. piece(s), set, litre, kilogramme The mandatory values are defined in Annex 4 <i>Code lists</i> . | Value list |

6.1 Price on request

A price on request (POR) for articles of the article types <Maßanfertigung> (customization), <Dienstleistung> (service) or <Software> can be stated as long as it is also stated in other publications.

If an article is labelled <Preis auf Anfrage> (price on request), it is not possible to state further prices. An existing article may not be changed to <Preis auf Anfrage> (price on request) during its life cycle.

| Content | Description | Structure |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| Preis auf Anfrage | Indication as to whether a valid price will only be transmitted on request The mandatory values are defined in Annex 4 <i>Code lists</i> . | Yes/No |

6.2 Sales tax class

No concrete tax rate is used here; the different tax classes are entered via a value list. One valid VAT class for Germany is stated for each article. Also, information on the withholding method and on the reverse charge mechanism can be given.

| Content | Description | Structure |
|--------------|-------------------------------------------------------------------------------------------------------|------------|
| Umsatzsteuer | Sales tax class of the article The mandatory values are defined in Annex 4 <i>Code lists</i> . | Value list |

6.3 Invoicing basis

Information from a value list as to the basis for invoicing. The invoicing basis is **only relevant in the relationship between trade and crafts** and is not displayed in the ARGE systems. An industrial company cannot provide this invoicing basis to or through the systems of the ARGE because it will not be displayed in the relevant interfaces and software systems.

| Content | Description | Structure |
|------------------|--------------------------------------------------------------------------------------------------------------|------------|
| Abrechnungsbasis | Indication of the basis for invoicing The mandatory values are defined in Annex 4 <i>Code lists</i> . | Value list |

6.4 Price lines

| Content | Description | Structure |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Bezeichnung | Designation of the price line. It serves for identification. | Text 40 |
| Linienpreis_Preiswert | Indication of price | Decimal number |
| Linienpreis_Waehrung | Indication of the currency for the price value The mandatory values are defined in Annex 4 <i>Code lists</i> . | Value list |
| Linienpreis_Preisbasis | Indication of quantity for the article the price refers to: Possible values are 1, 10, 100, 1000 | Integer 9 |
| Linienpreis_Preismengeneinheit | Indication of quantity unit for the article the price refers to: e.g. piece, set, litre, kilogramme The mandatory values are defined in Annex 4 <i>Code lists</i> . | Value list |

7 Groups

All articles are classified in different group structures. **Four group types** have been predefined, with the naming and classifying of the single groups being the organization's responsibility.

7.1 Commodity group

The commodity group assigns the article **to a specified upper group structure (e.g. bathtub, fitting, radiator) based on its intended use**, which ideally corresponds to the table of contents of the print catalogue. This first allocation is relevant for classifying the article under a category. Each defined commodity group is given a group code consisting of 3 characters max., and a descriptive text.

| Content | Description | Structure |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------|------------|
| Gruppenart | Commodity group of the industry (upper, first classification) The mandatory values are defined in Annex 4 <i>Code lists</i> . | Value list |
| Gruppennummer | Commodity group ID (code): e.g. 010 | Text 3 |
| Gruppenbezeichnung | Plain text for description of the category, e.g. "fittings" | Text 40 |

Every defined commodity group can be complemented by documents or images (cf. chapter 7.5).

An unambiguous identification number (ID) to be maintained on the article provides a reference to the related commodity group.

| Content | Description | Structure |
|-----------------|---------------------------------------------------------------------------------------------------------------------|-----------|
| Warengruppen ID | Identification number, reference to the related commodity group: the article is assigned to this commodity group | Text 3 |

7.2 Product group

After categorization under a commodity group, the product group facilitates a **finer classification of the article with regard to e.g. brand-, range- or model names**. The definition of product groups and the classification as well as the allocation of group codes and descriptive texts are chosen by the organization.

| Content | Description | Structure |
|--------------------|-------------------------------------------------------------------------------------------------------------------------|------------|
| Gruppenart | Product group of the industry (finer classification) The mandatory values are defined in Annex 4 <i>Code lists</i> . | Value list |
| Gruppennummer | Product group ID (code): e.g. 010001 | Text 10 |
| Gruppenbezeichnung | Plain text for description of the finer classification, e.g. <i>Produkta</i> fittings series | Text 40 |

Every defined product group can be complemented by documents or images (cf. chapter 7.5.)

An unambiguous identification number (ID) to be maintained on the article provides a reference to the related product group.

| Content | Description | Structure |
|-------------------|------------------------------------------------------------------------------------------------------------------|-----------|
| Produktgruppen ID | Identification number, reference to the related product group: the article is assigned to this product group. | Text 10 |

7.3 Discount group

The discount group assigns the article to a **condition group** within the 3-level distribution channel. Only general information is to be transmitted, no percentages. The contents of the discounts and the coding are defined by the organization.

| Content | Description | Structure |
|--------------------|--------------------------------------------------------------------------------------------------------------------------|------------|
| Gruppenart | Discount group of the data supplier (condition group) The mandatory values are defined in Annex 4 <i>Code lists</i> . | Value list |
| Gruppennummer | Discount group ID (code): e.g. RG12 | Text 4 |
| Gruppenbezeichnung | Plain text for description of the classification, e.g. discount group 12 | Text 40 |

Every defined discount group can be complemented by documents or images (cf. chapter 7.5).

An unambiguous identification number (ID) to be maintained on the article provides a reference to the related discount group.

| Content | Description | Structure |
|------------------|-------------------------------------------------------------------------------------------------------------------|-----------|
| Rabattgruppen ID | Identification number, reference to the related discount group: the article is assigned to this discount group | Text 4 |

7.4 Bonus group

Bonus groups allocate the articles to a possible **condition group depending on the purchase quantity** (e.g. payment of bonuses depends on specific purchase quantities). The contents of the bonus groups and the coding are defined by the organization. Only general information is to be transmitted, no percentages.

| Content | Description | Structure |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------|------------|
| Gruppenart | Bonus group of the industry (condition group/purchase quantity) The mandatory values are defined in Annex 4 <i>Code lists</i> . | Value list |
| Gruppennummer | Bonus group ID (code): e.g. BG1 | Text 35 |
| Gruppenbezeichnung | Plain text for description of the classification, e.g. bonus group 1 | Text 40 |

Every defined bonus group can be complemented by documents or images (cf. chapter 7.5).

An unambiguous identification number (ID) to be maintained on the article provides a reference to the related bonus group.

| Content | Description | Structure |
|-----------------|-------------------------------------------------------------------------------------------------------------|-----------|
| Bonusgruppen ID | Identification number, reference to the related bonus group: the article is assigned to this bonus group | Text 35 |

7.5 Accessory group

Accessories groups allow the subdivision of accessory articles that are assigned to an article.

| Content | Description | Structure |
|--------------------|-------------------------------------------------------------------------------------------------|------------|
| Gruppenart | Accessory group for industry The mandatory values are defined in Annex 4 <i>Code lists</i> . | Value list |
| Gruppennummer | Accessory group ID (code): e.g. ZG 1 | Text 35 |
| Gruppenbezeichnung | Plain text as a description of the classification e.g.: mounting material | Text 40 |

The assignment of the article to the accessory group is done via a unique identification number (accessory group ID), which is specified in the article attributes. Optionally, a sequence can be specified. For more information, see Chapter *Article Attributes*

7.6 Group document allocation

Every group can be complemented by documents or images. It is possible to store several documents per group. At this point, all media types can be allocated, just like on the article (cf. chapter 9), and also the **additional media type LO for logo**.

| Content | Description | Structure |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| Dokument | Name of the document file (observe file naming convention, cf. chapter 9) | Text 35 |
| Dokumententyp | Type selection from predefined value list (cf. chapter 9.1.3 and chapter 9.2.1); in addition, LO The mandatory values are defined in Annex 4 <i>Code lists</i> . | Value list |
| Bild Verwendung | Web image or printed image: only relevant to images The mandatory values are defined in Annex 4 <i>Code lists</i> . | Value list |
| Dokument Bezeichnung | Detailed description of the content of the allocated documents | Text 40 |
| Dokument Sortierreihenfolge | Definition of a sorting sequence in case of several documents being allocated to one group | Integer |

7.7 Group structure trade to specialized crafts businesses

This additional classification of articles in a commodity group and a product group is **relevant to the relation trade to crafts**. It is possible to transmit product groups as a function of commodity groups relating to one article.

7.7.1 Commodity groups trade

The commodity group assigns the article to a specified upper group structure.

| Content | Description | Structure |
|------------------------------|--------------------------------------------------------------------|-----------|
| Hauptwarengruppenkennzeichen | 3-digit commodity group ID | Text 3 |
| Hauptwarengruppenbezeichnung | Plain text for description of the commodity group, e.g. "fittings" | Text 40 |

An unambiguous commodity group identification number (ID) to be maintained on the article provides a reference to the related commodity group.

| Content | Description | Structure |
|------------------------------|-------------------------------------------------------------------------------------------|-----------|
| Hauptwarengruppenkennzeichen | Reference to the related commodity group: the article is assigned to this commodity group | Text 3 |

7.7.2 Product groups trade

After categorization under a commodity group, articles can additionally be assigned to a subordinate product group.

| Content | Description | Structure |
|------------------------------|----------------------------------------------------------------------|-----------|
| Hauptwarengruppenkennzeichen | 3-digit commodity group ID | Text 3 |
| Warengruppenkennzeichen | 10-digit product group ID | Text 10 |
| Warengruppenbezeichnung | Plain text for description of the product group, e.g. wash basin tap | Text 40 |

An unambiguous product group identification number (ID) to be maintained on the article provides a reference to the related product group.

| Content | Description | Structure |
|-------------------------|---------------------------------------------------------------------------------------|-----------|
| Warengruppenkennzeichen | Reference to the related product group: the article is assigned to this product group | Text 10 |

8 Logistics

Providing logistical data related to the articles is important for all market partners involved and therefore an integral part of the complete data record. This optimizes or even facilitates the planning of routes and calculation of storage space in the trade. Logistical data are **basic details regarding the dimensions and weights** of an article, **minimum order quantities** and **packaging units**.

These data also include information on durability, hazardous goods, bulk goods, and delivery times.

8.1 Information on the content

About the information on the content, if the article is invoiced apiece and if the content can be stated.

Examples:

- Pipe -> Information that the pipe consists of 50 m
- Roof gutter -> Information that the gutter consists of 3 m
- Knob plate -> Information that the plate is 1.2 m²
- Canister of solvent -> Information that the container contains 10 litres
- Sack of spackle -> Information that the sack has 5 kg
- Package of screws -> Information that 100 pieces are in the package

| Content | Description | Structure |
|----------------|----------------------------------------------------------------------------------------|----------------|
| Inhaltsmenge | Specification of the quantity in the content unit related to the order quantity unit | Decimal number |
| Inhaltseinheit | Unit of the content The mandatory values are defined in Annex 4 <i>Code lists</i> . | Value list |

8.2 Basic article

The basic article corresponds to quantity 1 of the price quantity unit. All articles being calculated with the basic units of piece, pair, set or dozen must be provided with the dimensions and the weight of the basic article.

The statement of the length, width and height result from **a (notional) cuboid around the basic article**.

“Length” and “width” describe the footprint of the packaged product in “normal” storage.

The gross weight must be greater than or equal to the net weight. **When using bags, the maximum dimensions of the bag** (length, width, height) form the basis of the measurements.

The following dimensions and weights are to be provided:

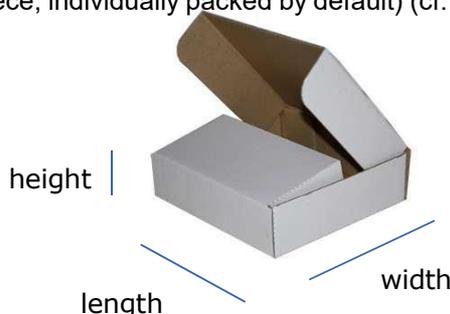
| Content | Description | Structure |
|-------------------|----------------------------------------------------------------------------------------------------------------------------|----------------|
| Länge | Length of the basic article incl. packaging | Decimal number |
| Breite | Width of the basic article incl. packaging | Decimal number |
| Höhe | Height of the basic article incl. packaging | Decimal number |
| Gewicht | Weight of the basic article | Decimal number |
| Anzahl Packstücke | Quantity stating how many packages a basic article consists of, e.g. a shower screen is delivered in 2 boxes (=2 packages) | Integer |

If the basic article is generally **individually packed**, the **dimensions and weight must be stated including packaging**.

Illustration 1: Example tap (calculated per piece, individually packed by default) (cf. chapter 12)



basic article



Dimensions of the basic article in (notional) cuboid

Relevant information for the example “tap”:

- Price unit: Piece
- Price basis: 1
- Minimum order quantity: 1
- Minimum order quantity unit: Piece
- Dimensions of basic article: Dimensions (length, width, height) of the packaging: 545x192x73 mm
- Weight of basic article: Weight (g) incl. packaging: 2.1 kg
- PU 1: Box, 8 pieces; 575 x 370 x 365, weight of the box: 18.15 kg
- PU 2: Box, 16 pieces; 590 x 780 x 375, weight of the box: 37.45 kg

If the basic article is generally unpacked or not individually packed, dimensions and weight must be stated without packaging.

Illustration 2: Example screw (calculated per piece, not individually packed by default)
(cf. chapter 12)

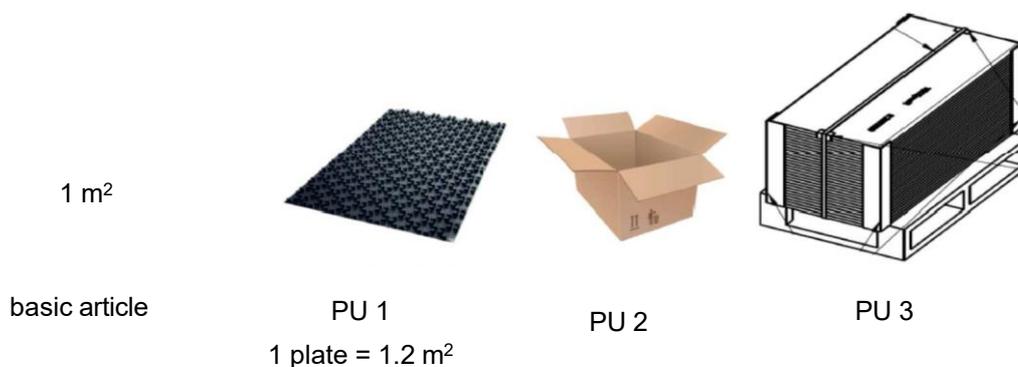


Relevant information for the example “screw”:

- Price unit: Piece
- Price basis: 1
- Minimum order quantity: 250
- Minimum order quantity unit: Piece
- Dimensions of basic article: Length, width, height of the single screw
- Weight of basic article: Weight (g) of the single screw
- PU 1: Box 250 pieces; 64 x 126 x 60, weight of the box
- PU 2: Box 4500 pieces; 304 x 205 x 198, weight of the box

For articles calculated by length, surface, volume or weight, stating the dimensions and weight of the basic article is not necessary.

Illustration 3: Example nub plate (calculated per square metre) (cf. chapter 12)



Relevant information for the example “nub plate”:

- Price unit: m²
- Price basis: 1
- Minimum order quantity: 9.6
- Minimum order quantity unit: m²
- Dimensions of basic article: irrelevant
- Weight of basic article: irrelevant
- PU 1: plate 1.2 m²; 1440 x 800 x 70, weight of the plate
- PU 2: box 9.6 m²; 1510 x 890 x 380, weight of the box
- PU 3: pallet 57.6 m²; 1510 x 890 x 2300, weight of the pallet

For article consisting of several packages (number of packages unequal to 1), stating the dimensions and weight is not necessary. At present, the **dimensions of several packages cannot be transmitted**.

Recommendation: Transmission of the total weight of all packages and the dimensions of the notional cuboid around all packages.

8.3 Packaging units

Up to **five different packaging units** can be given for every article. For each packaging unit, the packaging type, the packaging quantity, and the packaging quantity unit are given. For each defined packaging unit, the required dimension- and weight details, and as a rule a separate GTIN, are given. The packaging units must be given **without gap and in ascending quantity of the article contained therein**, with the quantity and weight getting bigger in ascending order (details re PU 2 need to be greater than those re PU 1, cf. examples).

The dimensions of the packaging unit are stated with “length”, “width” and “height”. “Length” and “width” describe the footprint of the packaging unit in “normal” storage.

For articles calculated by length, surface, volume or weight, stating the smallest sales unit (irrespective of the minimum order quantity) as packaging type in PU 1 is required.

The statement of a GTIN at the packaging unit serves for the identification and has to correspond to the packaging unit. The GTIN of the article is only allowed to use, if the quantity of the packaging unit is stated with “1”. In this case the GTIN has also to be stated at the article. If a GTIN is stated at the PU, a GTIN must be in place at the article as well. Excluded are articles, which are invoiced as per length, surface, volume or weight as well as articles (e.g. package screws) which are not individually wrapped as standard.

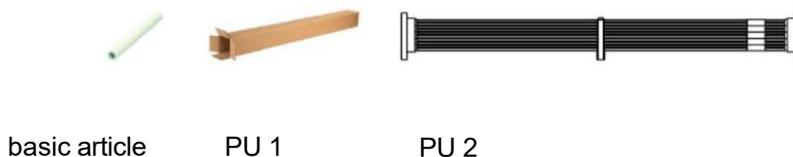
Example of a correct display of the packaging units:

| Content | PU 1 | PU 2 | PU 3 | PU 4 | PU 5 |
|--------------------------------|------|------|------|------|------|
| VPE: Verpackungsart | CT | CT | PN | | |
| VPE: Menge | 6 | 12 | 240 | | |
| VPE: GTIN | | | | | |
| Länge der Verpackungseinheit | 305 | 605 | 1210 | | |
| Breite der Verpackungseinheit | 405 | 405 | 810 | | |
| Höhe der Verpackungseinheit | 105 | 105 | 525 | | |
| Gewicht der Verpackungseinheit | 6.2 | 12.4 | 260 | | |

Example of an incorrect display of the packaging units:

| Content | PU 1 | PU 2 | PU 3 | PU 4 | PU 5 |
|--------------------------------|------|------|------|------|------|
| VPE: Verpackungsart | CT | | PN | CT | |
| VPE: Menge | 6 | | 240 | 12 | |
| VPE: GTIN | | | | | |
| Länge der Verpackungseinheit | 305 | | 1210 | 605 | |
| Breite der Verpackungseinheit | 405 | | 810 | 405 | |
| Höhe der Verpackungseinheit | 105 | | 525 | 105 | |
| Gewicht der Verpackungseinheit | 6.2 | | 260 | 12.4 | |

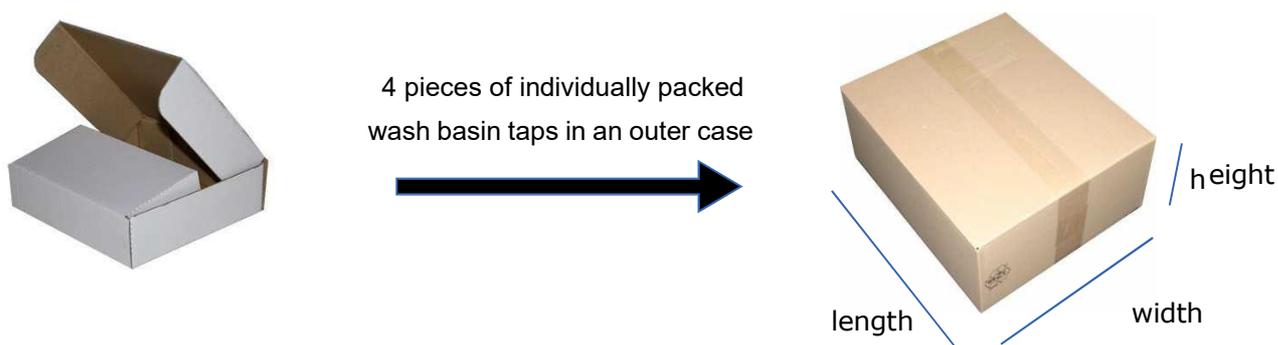
Illustration 4: Example tube (calculated by metres):



Basic article: 1 metre of tube (not supplied by the metre!)
 PU 1: box with 1 rod of 5 m
 PU 2: box with 20 rods of 5 m each

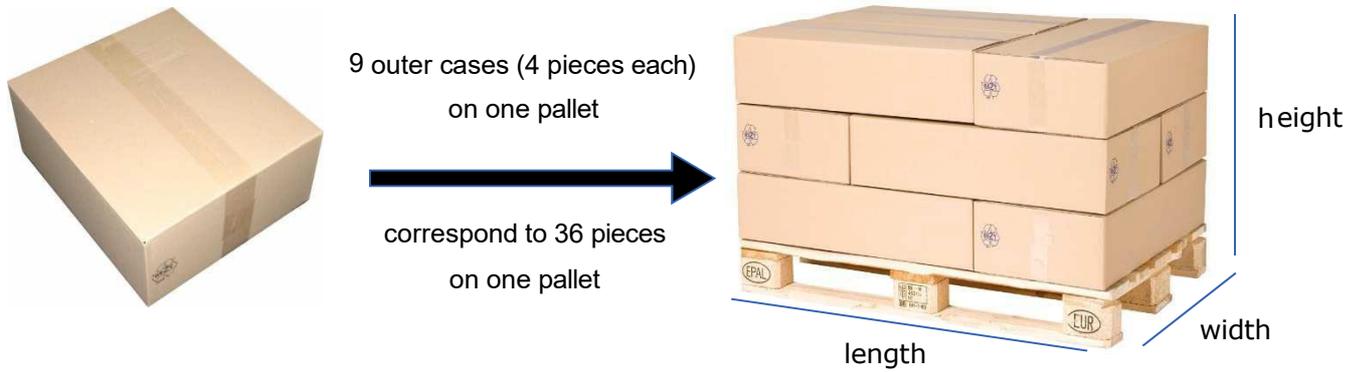
| Content | Description | Structure |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------|----------------|
| VPE: Verpackungsart | Definition of the packaging type, e.g. box, basket... | Value list |
| VPE: Menge | Number of basic articles contained in the packaging unit | Decimal number |
| VPE: GTIN | Assignment of a new GTIN for the packaging unit. This GTIN is not identical with the GTIN of the article. | GTIN |
| Länge der Verpackungseinheit | Length of the packaging unit | Decimal number |
| Breite der Verpackungseinheit | Width of the packaging unit | Decimal number |
| Höhe der Verpackungseinheit | Height of the packaging unit | Decimal number |
| Gewicht der Verpackungseinheit | Weight of the packaging unit | Decimal number |

Illustration 5: Example of a packaging unit 1 (PU 1)



PU 1 corresponds to a PU quantity of 4 with the PU quantity unit CT (box).

Illustration 6: Example of a packaging unit 2 (**PU 2**)



PU 2 corresponds to a PU quantity of 36 with the PU quantity unit PAL (pallet).

8.4 Minimum order quantity

The minimum order quantity of an article is relevant information and contains the smallest quantity of an article that is available for order. The stated **quantity may correspond to the content of packaging unit 1** (cf. Chapter 8.3). The quantity units are defined in a value list.

| Content | Description | Structure |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Mindestbestellmenge | Minimum order quantity: always greater than 0 e.g. quantity/number of pieces (5) or length specifications (2.5) | Decimal number |
| Mindestbestellmenge Einheit | Unit of the minimum order quantity, e.g. PCE for piece, MTR for metre The mandatory values are defined in Annex 4 <i>Code lists</i> . | Value list |

8.5 Article sets

An article set is a **compilation of article numbers of one or more articles** that are combined in a **complete set**. Article sets are consequently composed of the set articles (“sub-articles”) and jointly form the outbound article with a new factory article number (cf. chapter 1.2). **All** set articles have to exist in the assortment and be **separately available for order**. The commercial and logistic processes (e.g. ordering and delivering) are made by the components of the set.

Article sets can only be used if the set corresponds **exactly** to the sum of the set articles, i.e. it is irrelevant whether the set or the set articles are ordered.

Additionally, the following definitions apply:

- Articles containing allocation of set articles must have the article type “Set” (PAK).
- Articles of the article type “Set” (PAK) must contain allocations of set articles.
- The article set consisting of one single article with the quantity “1” is not allowed.
- Within a set it is not allowed to allocate articles of the type “Set” (PAK), “Sonderartikel” (SON), “Gebühr” (GEB) or “Packstück” (PKS).
- Logistical sets (LOS) can be used as a component of sets.
- The components (referenced article or quantity) of an article set may not be changed.
- The manufacturer's details can be used to map the product sets within the data provided by wholesalers for the trade, as not all products are necessarily included in the wholesale catalogue.

| Content | Description | Structure |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------|----------------|
| Zugeordneter Artikel | Article number of the associated article. Example: JKS300620112 | String 15 |
| Menge | Number of associated articles for the article set/package in question, e.g. 5 | Decimal number |
| Hersteller ID | Unambiguous identification of the manufacturer e.g. GLN | Text 13 |
| Hersteller ID Typ | Type of manufacturer ID e.g. • GLN (Code “gln”) • Open data check (code “opendatacheck_shk”) Duns (Code “duns”) | Text 35 |

8.6 Logistical sets

If items are supplied in more than one component, where the **sub-items are either wholly or partially unavailable for order**, this constitutes a 'logistical set'. Commercial processes (e.g. ordering) are carried out via the logistical set. Logistical processes (e.g. delivery) are carried out via the components. All components mentioned must be available in the product range.

Additionally, the following definitions apply:

- The number of packages of the logistical set must be greater than “1”.
- Articles that contain allocations of components (set articles) that are not all orderable must have the article type “Logistical sets” (LOS).
- Articles of the article type “Logistical set” (LOS) must contain allocations of components (set articles).
- A logistical set consisting of only one component with the quantity “1” is not allowed.
- Within a “Logistical set”, no articles of the type “Set” (PAK), “Sonderartikel” (SON) or “Gebühr” (GEB) may be allocated.
- Unlike item sets, the components (referenced items and quantities) of a ‘logistical set’ may be changed in subsequent data deliveries.
- The manufacturer's details can be used to map the logistical sets within the data provided by wholesalers for the trade, as not all products are necessarily included in the wholesale catalogue.

| Content | Description | Structure |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------|----------------|
| Zugeordneter Artikel | Article number of the associated article. Example: JKS300620112 | String 15 |
| Menge | Number of associated articles for the logistical set in question, e.g. 5 | Decimal number |
| Hersteller ID | Unambiguous identification of the manufacturer e.g. GLN | Text 13 |
| Hersteller ID Typ | Type of manufacturer ID e.g. • GLN (Code “gln”) • Open data check (code “opendatacheck_shk”) Duns (Code “duns”) | Text 35 |

Example:

Logistical set (4713) (type logistical set)

- 4711 – non-condensing device (cannot be ordered separately) (type package)
- 4712 – storage tank (can be ordered separately) (type standard article)

Example of the usage of a logistical set within an article set:

Set incl. exhaust system (4720) (type PAK)

- Logistical set (4713) (type logistical set)
- Exhaust system (4721) (type standard article)

8.7 Durability

Stating a durability period is useful with certain products, above all if they (partly) lose their function after a certain period of time (e.g. self-adhesive pipe insulation).

This **detail does not provide any information** on possible **warranty claims**, potential temporary storage of an article or legal requirements.

| Content | Description | Structure |
|----------------------|--------------------------------------------------------------------------------|-----------|
| Haltbarkeitszeitraum | Indication of the period in months 1–99; 99 stands for unlimited durability | Integer |

8.8 Standard delivery period

The standard delivery period refers to the **non-binding period** from the receipt of order by the industry to the arrival of the goods at the market partner for a standard purchase order. Standard purchase order means an order without indication of delivery times. This does not apply to scheduled orders.

At the wholesalers' the standard delivery period is used as information for stock management.

| Content | Description | Structure |
|--------------------|------------------------------------------------------------------------------------------------------------|-----------|
| Standardlieferzeit | Indication of a period given in workdays (1 week has 5 workdays) The statement "0" days is not allowed. | Integer 3 |

8.9 Exportable articles

An article is labelled as exportable if it is generally approved for exportation, irrespective of the importing country. Exportable articles require the **indication of a country of origin** and a **commodity number**. As there is no commodity number for services and software and also no country of origin, this information cannot be provided for articles labelled accordingly.

| Content | Description | Structure |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| Exportfähig | Indication as to whether the article is approved for exportation. | Yes/No |
| Warennummer | Information is necessary if the article is exportable : Statistical commodity group number required for customs- (import/export) and Intrastat declarations. Exception: Exportable services and software have no commodity number. | Integer 8 |
| Ursprungsland | Optional indication of a country of origin (primarily relevant to export articles): Country of origin = the country where the article was manufactured or the last essential processing step was completed | Value list |

9 Media data

Media data related to an article can be transmitted in the form of image data (colour images, line drawings, milieu images) and complementary documents (e.g. installation instructions, data sheets, videos, CAD drawings). Several images can be stored for one article.

The **file naming convention for image- and document files limits** the file name **to 256 characters at maximum** incl. dot and file extension. The permitted characters are alphanumeric including underscore and hyphen, with precisely one dot before the file extension. The file name may not contain any umlauts, special characters, blanks or further dots.

The file name can be upper and/or lower case; for technical reasons, all will be converted to lower case after processing.

When using images and documents that no longer have a reference to the article and that were provided in older data deliveries, you may violate copyrights, since the authorisation to distribute only existed at the time of distribution.

When changing media files, it is recommended that you use a new file name so that files are not overwritten at the recipient's end. This ensures that the correct files are available in the article history.

9.1 Images

All articles and spare parts from the assortment are allocated an image or a substitute image if necessary, which, as a rule, must be marked in the data record as a substitute. Several images can be stored with one article. With regard to the usage of image files, there is a distinction between web images and print images. The following information on image files is required for allocating them to the article:

| Content | Description | Structure |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| Dokument | Name of the document file (observe file naming convention) | Text 256 |
| Dokumententyp | Type of document (image), cf. chapter 9.1.3 The mandatory values are defined in Annex 4 <i>Code lists</i> . | Value list |
| Bild Verwendung | Web image or print image The mandatory values are defined in Annex 4 <i>Code lists</i> . | Value list |
| Stellvertreterkennzeichen | Indication as to whether the article depicted corresponds to the article or serves as a substitute. The mandatory values are defined in Annex 4 <i>Code lists</i> . | Yes/No |
| Dokument Bezeichnung | Detailed description of the contents of documents: Example: 5 installation instructions for an article without differentiation; differentiation is possible in connection with the sorting sequence. | Text 40 |
| Dokument Sortierreihenfolge | Pre-setting a sequence in case of several documents (incl. images) of an image type or document type related to the article. Can be used for optimal usability in the target systems. | Integer |
| <u>Dokumentsprache</u> | Specification of the languages in which the content in the document is available. Multiple languages can be specified. The mandatory languages are defined in Annex 4 <i>Code lists</i> . | Code list <i>Languages</i> |

If more than one file is stated for an image type, the description should be used and the sorting sequence must be used, in order to obtain a differentiation of the files and a unique indication.

If identical images are provided in different formats and resolutions, these image allocations should contain an identical text in the field “Dokument Bezeichnung“, in order to illustrate the coherence.

Example:

| Factory article number | Document | Document type | Image use | Placeholder | Document description | Document sort order | Document language |
|------------------------|-------------------------------|---------------|-----------|-------------|----------------------|---------------------|-------------------|
| 4711 | xxb_Produktbild_web_klein.jpg | B_ | Web | false | product image | 1 | |
| 4711 | xxb_Produktbild_web_gross.jpg | B_ | Web | false | product image | 2 | |
| 4711 | xxb_Produktbild_druck.eps | B_ | Print | false | product image | 3 | |
| 4711 | xxdt_Detailbild_web.jpg | DT | Web | false | detail image | 4 | |
| 4711 | xxdt_Detailbild_druck.jpg | DT | Print | false | detail image | 5 | |
| 4712 | | BF | | | | | |
| 4713 | | KB | | | | | |

9.1.1 Web images

Web images are primarily needed for **presenting the article in web applications**, such as displaying it in the shop and in the article search of Building-Masterdata as well as in the in-house systems of the market partners. For this reason, the size of web images is limited to a maximum width of 1920 pixels and a maximum height of 1080 pixels. Graphic formats that can be used for web images are JPEG, PNG, and SVG. If the SVG format is used, no references to external sources may be used.

These include, for example:

- <image href=“...”>
- <use href=“...”>
- <script href=“...”>
- <style>@import url(...)</style>
-
- etc.

9.1.2 Print images

Print images are **used in print media** and have a width of approx. 1500 pixels and a height of approx. 1500 pixels at a size of 100 x 100 mm (i.e. approx. 300 dpi). Print image files are provided either in the RGB or in the CMYK colour space. Graphic formats that can be used for print images are limited to JPEG, PNG, EPS, TIFF, and SVG. If the SVG format is used, no references to external sources may be used.

These include, for example:

- <image href=“...”>
- <use href=“...”>
- <script href=“...”>
- <style>@import url(...)</style>
-
- etc.

9.1.3 Media types for images

The following media types are available for both web images and print images as defined in a value list:

| Content (examples) | Description | Media type |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| Farbbilder | Cropped image (black & white or colour) of an article (without background, unpacked) | B_S_ |
| Strichzeichnungen | Image of an article consisting of lines | U_V_ |
| Milieu | Image of an article within an application scenario | MI |
| Detailbild | View of an article in detail | DT |
| Logo | Attention: Logos as media types are only permitted with groups, cf. chapter 7.5. | LO |
| Kein Bild | In this case, no file can be specified, since there is no article image. No image is used in other publications and web applications for this article. | KB |
| Bild folgt | In this case, no file can be specified. The picture will follow within the next 6 months. | BF |
| Explosionszeichnung | The specified file is an exploded view. | X_ |

Examples of the media type images:

B_fotorealistic_farbbild

B_photorealistic_colour_image

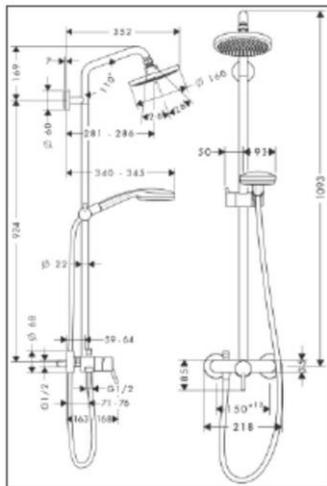


S_fotorealistisch_schwarzweiß_bild

S_photorealistic_black-and-white_image



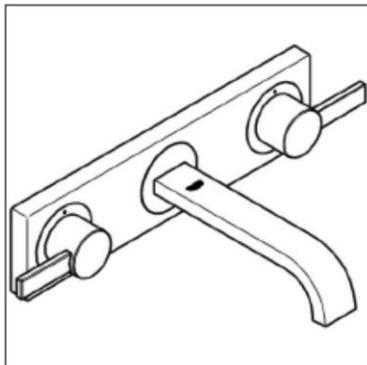
V_strichzeichnung_vermaßt
V_line_drawing_dimensioned



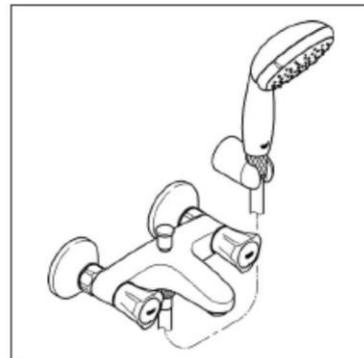
V_strichzeichnung_vermaßt
V_line_drawing_dimensioned



U_strichzeichnung_unvermaßt
U_line_drawing_undimensioned



U_strichzeichnung_unvermaßt
U_line_drawing_undimensioned



DT_Detail
DT_detail



MI_Milieubild
MI_milieu_picture



9.2 Documents

All other media data that do not correspond to the <Bilddaten>/<image data> file type, are documents by definition. **Documents associated** to an article can be **complementary and informative** or **mandatory**, e.g. with hazardous goods in the form of a HAZMAT data sheet. Several documents of one document type can be stored with one article. Documents corresponding to several document types with regard to content can be assigned multiple times with the according document types.

Example: a PDF document containing a datasheet and assembly instructions.

Complementary documents can be provided to the master data server in standard formats, i.e. there is no limitation to particular formats.

| Content | Description | Structure |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| Dokument | Name of the document file (observe file naming convention, cf. chapter 9) | Text 256 |
| Dokumententyp | Type of document, cf. chapter 9.2.1 The mandatory values are defined in Annex 4 <i>Code lists</i> . | Value list |
| Dokument Bezeichnung | Detailed description of the contents of documents: Example: 5 installation instructions (type MA) for an article without differentiation; differentiation is possible in connection with the sorting sequence. | Text 40 |
| Dokument Sortierreihenfolge | Pre-setting a sequence in case of several documents (incl. images) of an image type or document type for one article. Can be used for optimal usability in the target systems | Integer greater than 0 |
| Dokumentsprache | Indication of the languages in which the contents of the document are written. Several languages may be specified. The mandatory values are defined in Annex 4 <i>Code lists</i> . | Code list <i>Languages</i> |

If more than one file is stated for an image type, the description and the sorting sequence should be used, in order to obtain a differentiation of the files and a unique indication.

9.2.1 Media types for documents

All documents of the different media types can be provided to the master data server in all current data formats. The following media types are available for documents:

| Content | Description | Media type | Formats (mandatory) |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------------------|
| 2D-Draufsicht | 2-D top view of the article | 2D | No restrictions |
| 2D-Frontale | 2-D frontal view of the article | 2F | |
| 2D-Seitenansicht | 2-D lateral view of the article | 2S | |
| 3D-Daten | 3-D data | 3C | No restrictions |
| 3D-Daten zur Darstellung im Browser | - | 3A | |
| Datenblatt | Technical details of the article, unless they are mapped in other, more specific document types, e.g. wiring diagram, installation instructions, etc. | DB | PDF |
| Gefahrgut-Datenblatt | Information on hazardous goods/Material Safety Data Sheet | GG | PDF |
| Instruktionen/Bedienungsanleitung | Operating instructions for the article | IS | PDF |
| Montageanleitung | Installation instructions for craftsmen | MA | PDF |
| Wartungsanleitung | Information on the maintenance of the article | WA | PDF |
| Planungsanleitung | Information on planning and tendering | PA | PDF |
| Prospekte | Sales brochures B2B & B2C | PP | PDF |
| Zulassung | Approval of the article, if not mapped in other, more specific document types, e.g. fire protection, explosion protection etc. | ZL | PDF |
| Schulungsfolie | Training material for installation and use | SF | PDF |
| Leistungserklärung | Construction Products Directive | LE | PDF |
| Pflegeanleitung | Information on product care | PF | PDF |
| ErP Label | Energy label as energy labelling | EL | PDF |
| Schaltbild | Wiring diagram for installation | SB | PDF |
| Technische Zeichnung | Graphic description of the functions and characteristics of a product | TZ | PDF |
| UBA-Positivliste | List of the substances and materials used in articles suitable for contact with drinking water | UP | PDF |
| WELL-Label | WELL label as energy labelling | WL | PDF |
| Video | Film on the article | VI | No restrictions |
| Montagevideo | Film on the article / installation instructions | VM | |
| Tutorial | Training or instruction video | VT | |

| Content | Description | Media type | Formats (mandatory) |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------------------|
| Einzelprospekt | Individual brochure for one article | EP | PDF |
| Brandschutz | General Building Approval issued by the <i>Deutsches Institut für Bautechnik</i> [German Institute for Structural Engineering](certificate with approval no.) / fire protection | BS | PDF |
| Ex-Schutz | ATEX certification | EX | PDF |
| Korrosionsschutz | Proof of resistance to aggressive substances | KS | PDF |
| CE | CE Declaration of Conformity | CE | PDF |
| VDS-Zulassung | Certificates issued by the <i>Verband der Sachversicherer</i> [Property Insurer Association] | VD | PDF |
| Schallschutznachweis | Noise control inspection report and proof of suitability | SS | PDF |
| Prüfreport Lithiumbatterien | UN 38.3 Report | PL | PDF |
| Nachhaltigkeitszertifikat | Sustainability certificate | NZ | PDF |
| EPD Nachhaltigkeitszertifikat | EPD sustainability certificate | EPD | PDF |
| QNG Siegel | QNG seal | QNG | PDF |
| Vertragsformular | Contract form | VF | PDF |

10 Spare parts lists

A spare part is recognizable by the article type chosen (cf. chapter 1.2). Within one data delivery, spare parts lists can be defined and populated with spare parts. If a **spare parts list for an article** is given, the **allocation of an exploded-view drawing** (with all existing components being numbered) will prove useful. The position numbers in the spare parts list correspond to those in the exploded-view drawing to make sure that spare parts needed in practice can be identified and found. Spare parts lists can also be maintained for historical products (cf. chapter 11) if spare parts for these products are still available for order. For the mapping of spare parts within the data provided by wholesalers for the trade, the manufacturer's details are optional, as not all items are necessarily included in the wholesale catalogue.

| Content | Label | Structure | ETA | ETT |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----|-----|
| Listennummer | Identification number (ID) of the spare parts list | Text 35 | X | X |
| Zeilennummer | Consecutive line number of the spare parts list | Integer 3 | X | X |
| Zeilenart | ETA = spare parts list line is a complete line set ETT = spare parts list line is descriptive text that structures the list The mandatory values are defined in Annex 4 <i>Code lists</i> . | Value list | X | X |
| Positionsnummer | Indication of the position number in accordance with the associated exploded-view drawing | Text 10 | X | X |
| Ersatzteil | Factory article number of the spare part | Text 15 | X | |
| Preisgruppe | Indication of a price group | Text 5 | X | |
| Text | Descriptive text re the spare part or re content-related structure of the spare parts list | Text 35 | X | X |
| Baujahr von | Important information, especially with historical products | Date | X | |
| Artikelverweisart | A = active article HP = historical product The mandatory values are defined in Annex 4 <i>Code lists</i> . | Value list | X | |
| Hersteller ID | Unambiguous identification of the manufacturer e.g. GLN | Text 13 | X | |
| Hersteller ID Typ | Type of manufacturer ID e.g. • GLN (Code "gln") • Open data check (code "opendatacheck_shk") Duns (Code "duns") | Text 35 | X | |

Reference to an associated spare parts list is made by means of an unambiguous identification number (ID) allocated to the article.

| Content | Description | Structure |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------|-----------|
| Ersatzteillistennummer | Identification number, reference to an associated spare parts list: the article will be associated to this spare parts list. | Text 35 |

11 Historical products

A <Historisches Produkt>/<historical product> is an article that is not part of the assortment anymore but still kept in this category so that spare parts lists with spare parts for this product that are still available for order can be maintained. **A historical product is marked by stating a production period.**

Production lines often contain redundant factory article numbers of current and historical products. The desired article or spare part can only be identified and found with a combination of the factory article number of the historical product and the start (or end) of a year of construction.

| Content | Label | Structure |
|------------------------|--------------------------------------------------------------------------------------------------------|-------------|
| Historisches Produkt | Factory article number of the historical product | Text 15 |
| Baujahr von | Start of the production period | Date |
| Baujahr bis | End of the production period | Date |
| Baujahr Text | Notes/annotations regarding the years of manufacture/production periods. | Text 35 |
| Kurztext 1 | Structure of short text 1 (cf. chapter 4.2) | Text 40 |
| Kurztext 2 | Structure of short text 2 (cf. chapter 4.2) | Text 40 |
| GTIN | GTIN (cf. chapter 3.1.4) (13 or 14 characters) | GTIN format |
| Warengruppen ID | Reference to the commodity group (cf. chapter 7.1) | Text 3 |
| Produktgruppen ID | Reference to the product group (cf. chapter 7.2) | Text 10 |
| Ersatzteillistennummer | Reference to the defined spare parts list that must be included in the data delivery (cf. chapter 10). | Text 35 |

11.1 Allocation of documents to historical products

Just like with active articles, complementary documents or images can also be allocated to the historical products. The pivotal document to be associated is the exploded-view drawing for potential spare parts orders. For clear identification, historical products also require the start of the production period.

| Content | Description | Structure |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------|------------|
| Baujahr von | Start of the production period | Date |
| Dokument | Name of the document file (observe file naming convention) | Text 35 |
| Dokumententyp | Type of document (cf. chapter 9.2.1) The mandatory values are defined in Annex 4 <i>Code lists</i> . | Value list |
| Bild Verwendung | Web image/print image: indication only relevant with images The mandatory values are defined in Annex 4 <i>Code lists</i> . | Value list |
| Stellvertreterkennzeichen | Indication as to whether the article depicted corresponds to the article or serves as a substitute | Yes/No |
| Dokument Bezeichnung | Detailed description of the contents of documents | Text 40 |
| Dokument Sortierreihenfolge | Pre-setting a sequence in case of several documents (incl. images) related to the article for optimal usability in the target systems | Integer |

12 Typical applications

Further examples of the provision of logistics data regarding the basic article and packaging units:

| Tube: bar commodity, invoiced by the metre | | PU 1 | PU 2 | |
|---------------------------------------------------|------------|------------------|------------|--------------|
| Price unit | m | Packaging type | bar | box |
| Price basis | 1 | Quantity | 5 | 100 |
| Minimum order quantity | 100 | Dimensions in mm | 40x50x5000 | 400x100x5000 |
| Minimum order quantity unit | m | Weight in kg | 2.72 | 54.6 |
| Dimensions/weight of basic article | irrelevant | | | |

| Tube: coil commodity, invoiced by the metre | | PU 1 | PU 2 | |
|----------------------------------------------------|------------|------------------|-------------|--------------|
| Price unit | m | Packaging type | coil (roll) | pallet |
| Price basis | 1 | Quantity | 50 | 600 |
| Minimum order quantity | 50 | Dimensions in mm | 700x700x150 | 700x700x1340 |
| Minimum order quantity unit | m | Weight in kg | 14.775 | 186.5 |
| Dimensions/weight of basic article | irrelevant | | | |

| Nub plate, invoiced by the square metre | | PU 1 | PU 2 | |
|------------------------------------------------|----------------|------------------|-------------|--------------|
| Price unit | m ² | Packaging type | plate | box |
| Price basis | 1 | Quantity | 1.2 | 9.6 |
| Minimum order quantity | 9.6 | Dimensions in mm | 1440x800x70 | 1500x850x600 |
| Minimum order quantity unit | m ² | Weight in kg | 2.5 | 20.224 |
| Dimensions/weight of basic article | irrelevant | | | |

| Liquid, invoiced by the litre | | PU 1 | PU 2 | |
|--------------------------------------|------------|------------------|-------------|-------------|
| Price unit | L | Packaging type | jerrican | box |
| Price basis | 1 | Quantity | 5 | 20 |
| Minimum order quantity | 5 | Dimensions in mm | 250x200x100 | 260x410x210 |
| Minimum order quantity unit | L | Weight in kg | | |
| Dimensions/weight of basic article | irrelevant | | | |

| Putty, invoiced by the kilogram | | PU 1 | PU 2 |
|----------------------------------------|------------|------------------|---------------------------------|
| Price unit | kg | Packaging type | sack (bag) box |
| Price basis | 1 | Quantity | 5 30 |
| Minimum order quantity | 5 | Dimensions in mm | 100x100x200 650x150x250 |
| Minimum order quantity unit | kg | Weight in kg | 5.05 30.74 |
| Dimensions/weight of basic article | irrelevant | | |

| Tube, invoiced by the bar | | PU 1 | |
|-----------------------------------|------------|------------------|--------------|
| Price unit | pcs | Packaging type | box |
| Price basis | 1 | Quantity | 20 |
| Minimum order quantity | 1 | Dimensions in mm | 400x100x5000 |
| Minimum order quantity unit | pcs | Weight in kg | 54.6 |
| Dimensions of basic article in mm | 40x50x5000 | | |
| Weight of basic article in kg | 2.72 | | |

| Tube, invoiced by the coil | | PU 1 | |
|-----------------------------------|-------------|------------------|--------------|
| Price unit | pcs | Packaging type | pallet |
| Price basis | 1 | Quantity | 12 |
| Minimum order quantity | 1 | Dimensions in mm | 700x700x1340 |
| Minimum order quantity unit | pcs | Weight in kg | 186.5 |
| Dimensions of basic article in mm | 700x700x150 | | |
| Weight of basic article in kg | 14.775 | | |

| Nub plate, invoiced by the plate | | PU 1 | PU 2 |
|-----------------------------------------|-------------|------------------|-----------------------------------|
| Price unit | pcs | Packaging type | box pallet |
| Price basis | 1 | Quantity | 8 80 |
| Minimum order quantity | 8 | Dimensions in mm | 1500x850x600 1515x890x2300 |
| Minimum order quantity unit | pcs | Weight in kg | 20.224 212.5 |
| Dimensions of basic article in mm | 1440x800x70 | | |
| Weight of basic article in kg | 2.5 | | |

| | | |
|-----------------------------------------|-------------|------------------------------|
| Liquid, invoiced by the jerrican | | PU 1 |
| Price unit | pcs | Packaging type box |
| Price basis | 1 | Quantity 4 |
| Minimum order quantity | 1 | Dimensions in mm 260x410x210 |
| Minimum order quantity unit | pcs | Weight in kg 20.5 |
| Dimensions of basic article in mm | 250x200x100 | |
| Weight of basic article in kg | 5.1 | |

| | | |
|----------------------------------------|-------------|------------------------------|
| Putty, invoiced by the sack/bag | | PU 1 |
| Price unit | pcs | Packaging type box |
| Price basis | 1 | Quantity 6 |
| Minimum order quantity | 1 | Dimensions in mm 650x150x250 |
| Minimum order quantity unit | pcs | Weight in kg 30,74 |
| Dimensions of basic article in mm | 100x100x200 | |
| Weight of basic article in kg | 5.05 | |

| | | | | |
|-----------------------------------|----------|----------------------------|-------------|---------------|
| Transition sleeve Dim 16 | | PU 1 | PU 2 | PU 3 |
| Price unit | pcs | Packaging type bag | box | pallet |
| Price basis | 1 | Quantity 10 | 100 | 12800 |
| Minimum order quantity | 10 | Dimensions in mm 240x60x27 | 200x150x190 | 1200x800x1000 |
| Minimum order quantity unit | pcs | Weight in kg 0.722 | 7.421 | 967.8 |
| Dimensions of basic article in mm | 42x26x26 | | | |
| Weight of basic article in kg | 0.069 | | | |

| | | | |
|-----------------------------------|----------|------------------------------|---------------|
| Transition sleeve Dim 63 | | PU 1 | PU 2 |
| Price unit | pcs | Packaging type box | pallet |
| Price basis | 1 | Quantity 5 | 640 |
| Minimum order quantity | 1 | Dimensions in mm 190x240x200 | 1200x800x1000 |
| Minimum order quantity unit | pcs | Weight in kg 4.811 | 634.57 |
| Dimensions of basic article in mm | 93x70x70 | | |
| Weight of basic article in kg | 0.937 | | |

| Grease separator | |
|-----------------------------------|---------------|
| Price unit | pcs |
| Price basis | 1 |
| Minimum order quantity | 1 |
| Minimum order quantity unit | pcs |
| Dimensions of basic article in mm | 2100x800x2014 |
| Weight of basic article in kg | 160 |

| Tap | | PU 1 | PU 2 |
|-----------------------------------|------------|------------------------------|-------------|
| Price unit | pcs | Packaging type box | box |
| Price basis | 1 | Quantity 8 | 16 |
| Minimum order quantity | 1 | Dimensions in mm 575x370x365 | 590x780x375 |
| Minimum order quantity unit | pcs | Weight in kg 18.15 | 37.45 kg |
| Dimensions of basic article in mm | 545x192x73 | | |
| Weight of basic article in kg | 2.1 | | |

| Panel screw | | PU 1 | PU 2 |
|-----------------------------------|--------|----------------------------|-------------|
| Price unit | pcs | Packaging type box | box |
| Price basis | 1 | Quantity 250 | 4500 |
| Minimum order quantity | 250 | Dimensions in mm 64x126x60 | 304x205x198 |
| Minimum order quantity unit | pcs | Weight in kg 0.51 | 9.23 |
| Dimensions of basic article in mm | 35x4x4 | | |
| Weight of basic article in kg | 0.002 | | |