



Technische Lieferbedingungen
Kennzeichnung; Kennzeichnen der Versorgungsartikel
Identification; marking of supply items

TL A-0032			
Part 1			
Ausgabe: Issue:	7		
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In case of doubt, the German original is binding.

Beschaffungshinweise Procurement Types		
(X)		Code
(X)	an keinen Hersteller gebunden Not tied to any manufacturer	C
()	an einen Herstellerkreis gebunden durch Benutzungsrechtsvereinbarung Tied to a group of manufacturers by an agreement on user rights	E
()	an zugelassene Hersteller gebunden Tied to approved manufacturers	F
()	an einen Hersteller gebunden Tied to a single manufacturer	H

Aktualitätsprüfung der TL ist erforderlich
Please verify that this Technical Specification (TL) is up to date.

Änderung gegenüber der letzten Ausgabe Change with respect to the previous issue	Frühere Ausgabe Previous issue(s)	3	4	5	6
	Frühere Ausgabemonate Previous date(s) of issue	06.94	02.01	03.08	08.13

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NORMATIVE REFERENCES

By dated and undated references this TL includes requirements specified in other documents (standards, TL etc.). These documents are cited in the respective text passages (normative reference). All documents quoted in this TL are listed below. In case of dated references, later changes or revisions of the cited documents apply to the present TL only after their incorporation. In case of undated references the respective issue of the cited documents valid at the time of the conclusion of the contract applies.

1) DIN 1450	Lettering - Legibility
1) DIN 1451-1	Lettering - Linear-Antiqua without serifes - General
1) DIN 1451-3	Lettering; Linear-Antiqua without serifes; lettering for printing
1) DIN EN 1556	Bar coding - Terminology
1) DIN EN ISO 780	Packaging - Pictorial marking for the handling of goods
1) DIN EN ISO/IEC 15416	Information technology - Automatic identification and data capture techniques - Bar code print quality test specification; Linear symbols

- | | | |
|----|---------------------------|--|
| 4) | GS1 128
GS1 DataMatrix | GS1 Specification for data storage media ¹ (one or two-dimensional) - see Annex A and internet link ("sources of supply") |
| 2) | STANAG 4279 - AAP-23 | NATO Glossary of packaging terms and definitions |
| 3) | TL A-0032 Part 2 | Packaging - Marking of packages - Packing levels A, B, C, H, T |
| 3) | TL A-0032 Part 5 | Identification; Marking of supply items; data transfer |
| 3) | TL A-0068 | Marking of POL containers and their packages |
| 1) | VG 92016 | Boxes - Frames with protective disc for tables of contents |
| 1) | VG 95024 | Drawing set - Identification details, location, procedure, lettering, scope |
| 1) | VG 95055 | Property marks of the German Federal Republic - Guidelines for application and design |
| 1) | VG 95551 | Plates for identification for government property |

Sources of supply:

- 1) Beuth Verlag GmbH, 10772 Berlin
- 2) BAAINBw Z4.5, Postfach 30 01 65, 56057 Koblenz; E-Mail: baainbwz4.5@bundeswehr.org
- 3) BAAINBw, Postfach 30 01 65, 56057 Koblenz; <http://www.baain.de>
- 4) GS1 Germany, Maarweg 133, 50825 Köln; <http://www.gs1-germany.de> or the responsible national GS1

1 GENERAL

1.1 Scope

This TL covers

- the mandatory marking methods and
- the requirements to be met by marking

for products (supply items) to be delivered to the Bundeswehr.

Deviating specific marking requirements are specified in the respective TL of the supply item and/or equipment or are subject of the contract. As far as deviating or additional marking is mandatory in legal provisions, this shall also be taken into consideration. Thus, deviating requirements may also be based on legal requirements.

Legal requirements relating to marking shall be observed; they take precedence over the requirements specified in this TL.

The following order of precedence shall be observed in the field of marking:

1. Laws
2. Trade Association Regulations and rules ("BGV"/"BGR")
3. Marking requirements based on standards (DIN, EN ISO, VDE etc.)
4. Marking requirements in accordance with a TL

¹ A data storage medium provides information in a machine-readable format, this may be effected in a one-dimensional or two-dimensional manner. (See "internet link" - source of supply)

1.2 General technical-organisational requirements

1.2.1 The requirements specified in this TL are basic requirements for the marking of products (e.g. part numbers). They have to be met by the contractor without any restriction when this TL constitutes the sole contractual marking requirement, unless applicable legal provisions hold deviating regulations. No exception is permitted to zoned IT equipment.

1.2.2 The customer may exclude or complement the marking of specific products by individual provisions in the TL, technical drawings or other contractual documents. The individual provisions take precedence over the requirements specified in this TL.
In the absence of specific requirements the package shall be marked as specified in paragraphs 2.1 and 2.6.

1.2.3 Complementary individual provisions may be, e.g.:

- Classification level of sensitive items which shall be marked with the long title of the classification level in capital letters uniform in size. Items classified "Confidential" or higher shall be marked in red letters.
- Calibration dates on measuring and test equipment which shall be provided with a stick-on label in accordance with stock number 7530-12-179-6585 indicating the date of the last and next calibration as well as the order number/serial number.
- Factual and production-related additional marking, such as production number, configuration code, month and year of manufacture, batch number etc.
- Factual and production-related marking methods.

2 TECHNICAL REQUIREMENTS

2.1 Marking of individual products

The product shall be marked as follows:

a) the stock number and the manufacturer data (trade name/symbol) or NATO supply code for manufacturers; for examples see figures (Annex B - B.1, B.2, B.3 and B.4) or the part number and the manufacturer data (trade name/symbol)

or

the NATO supply code for manufacturers; only if the contract or contract annexes do not include the stock number

and

b) the property mark of the Federal Republic of Germany in accordance with VG 95055

and

c) an automatic identification element (AIT element) as described in paragraph 2.6.

In addition to the identification, the corresponding data shall be transmitted to the Bundeswehr Logistics Command (see TL A-0032 Part 5).

The data of data identifier DB 10 or DB 21 shall be entered on the notes of delivery/shipping documents.

2.1.1 Exceptions to AIT element marking obligation

Products do not need to be marked in accordance with the requirements defined in paragraph 2.1 if

- marking impaired the usability of the products
- the material properties and/or their functionality ruled out marking
- products are too small or their nature ruled out marking
- products are small parts (e.g. standard parts, electric components or piece parts etc.)
- marking by way of the AIT element is not documented in the drawing.

In these cases, the unit package (smallest package) shall be marked with the information specified in paragraph 2.6.

2.2 Marking of products used as components of sets

2.2.1 Products being components of sets

Each individual component of a set shall be marked in accordance with paragraph 2.1 with the exception of commercial tools stored in containers (cases, bags); such tools shall only be marked with the manufacturer data and/or the DIN designation.

The set-related marking must not be applied to components of the set but to the set container as specified in paragraph 2.3.

In case of sets without containers, it shall be applied to the packaging of the set in accordance with TL A-0032 Part 2.

2.2.2 Components of sets in packaging means

Components of sets in packaging means shall be marked in accordance with paragraph 2.3. The components shall also be listed in a table of contents to be fixed to the inside of the lid - in case of wooden cases by means of a frame including viewing window in accordance with VG 92016. The table of contents shall include data with respect to:

the set including stock number and item name as well as the empty container and the products stored in the container including their quantity and item name and/or their commercial name.

The table of contents shall be complemented by a packing scheme or the like, showing the position of the products in the container, if a general account is impaired by the large number or the shape of the supply items.

In case of sets stored in several packaging means, the container named "Case No. 1" (see paragraph 2.3) shall additionally hold a complete list of all components of the set, assigned to the individual packaging means, as well as of those stored outside the packaging means (see paragraph 2.4.2).

2.2.3 Components of sets outside packaging means

Set components which, due to their dimensions (e.g. drill rods), cannot be stored in the packaging means like the other components of the set shall be additionally provided with the note "Gehört zum Satz bzw. Gerät" ("*part of the set and/or equipment*") as well as the project reference number, stock number and item name.

2.3 Marking of packaging means

Bundeswehr packaging means are categorised as follows:

- Disposable packaging means (assigned to consumption and use), e.g. cardboard boxes, bags, cans etc.
- Reusable packaging means/shipping and storage containers (SSCs), belonging to a specific group of items, e.g. containers, boxes, hazardous goods packagings
- intermediate bulk containers (IBCs)/auxiliary transport and storage means for shipment and storage, e.g. pallets, boxes, containers

Packaging means used for continuous storage shall be additionally provided with a marking of the contents on the outside of the lid and at the ends.

If proper marking at the ends is not possible, it shall be applied to the front side upon prior approval by the customer.

Minimum data:

- stock number of the contents (product, equipment, set etc.)
- item name of the contents (product, equipment, set etc.)
- automatic identification feature in accordance with paragraph 2.6
- weight: "Brutto kg" ("gross weight kg") on the lower right corner of the box/container lid (for an example see Annex B)
- "Kiste ... von ... Kisten" ("Case No. ... of ... cases") in the left front corner (see Figure B.3) when the product, equipment, set etc. is stored in several cases/containers.

Packaging means requiring special handling due to their contents, e.g. glass measuring instruments, and, thus, additional marking shall be additionally provided with shipping marks in accordance with DIN EN ISO 780.

2.4 Marking of reusable packaging means

2.4.1 Reusable packaging means, empty:

These packaging means shall be marked in accordance with paragraph 2.4.2 below (for an example see Figure B.4).

2.4.2 Reusable packaging means with special retaining device/cushioning

Packaging means with integrated retaining device/cushioning shall be marked as follows:

Example:

Stock number/part number

Text: "packaging means with retaining device/cushioning"

Manufacturer data

(trade name/symbol or NATO supply code for manufacturers)

Text: "consisting of"

Text: "packaging means empty" with stock number or part number

Text:

"retaining device" with stock number or part number

8145-12-999-9999
Packmitteln mit Halterung/ Polsterung
D 9999
bestehend aus
- Packmitteln leer 8115-12-081-4750
- Halterung Tkz A 33 333.1

Location:

Front face below the equipment plate in case of empty container:

In case of empty containers, the respective space shall be saved for marking. Type size in accordance with VG 95024.

2.4.3 The marking of reusable containers used as package (including contents) is specified in TL A-0032 Part 2.

2.5 Marking of hoses and hose assemblies

Hoses and hose assemblies made of elastomers, Stock Class 4720, used in fluid power systems as well as for refuelling and pipelines, are subject to specific ageing control and compulsory identification.

The requirements for the respective hoses and hose assemblies regarding

- the maximum admissible age when delivered to the Bundeswehr and
- the minimum marking

may, on principle, be derived from

- specific VG standards on hoses and hose assemblies
- the published TL as well as
- other applicable specifications.

The respective contractor shall meet these requirements and warrant their fulfilment - also in connection with the approval for delivery granted by BAAINBw in accordance with the respective VG standards.

The continuation sheet of the invitation for bids/order (Annex C) is mandatory for delivery specifications which do not clearly indicate that these requirements (DIN EN standards, drawings etc.) must be met.

2.6 Automatic identification technology (AIT)

2.6.1 Implementation of automatic identification technology (AIT)

The Federal Ministry of Defence has ordered the use of AIT within the Bundeswehr. As a rule, the AIT element shall be located in direct vicinity of the above-mentioned marking of all supply items (catalogued defence materiel).

2.6.2 AIT standard

As a rule, AIT shall be implemented on the basis of the GS1 standard.

2.6.2.1 GS1 data identifier

The content for the implementation of the GS1 standard within the Bundeswehr shall be restricted to the

- GS1 data identifier (01) Global Trade Item Number (GTIN),
- which, on a case-by-case basis, may be supplemented by the
- GS1 data identifier (10) batch

or

- GS1 data identifier (21) serial number.

The decisions on whether to the use data identifiers (10 or 21) and, also, GTIN for packages, will be notified by the Bundeswehr Materiel Authority/project manager as additional contractual requirements (AIT marking for batch, AIT marking for initial production batch, AIT marking).

2.6.2.2 AIT special cases

For special cases, identification may be ensured by

- code 39 as a linear bar code (e.g. central pharmaceutical number)
- the radio frequency identification (RFID) technology. The decision on how to ensure identification will be notified by the customer as an additional contractual requirement (AIT marking for special cases).

2.6.3 AIT application

The contractor shall register as paying user with his national GS1 organisation in order to be assigned a globally unique corporation identifier, the so-called global location number (GLN). The GS1 organisation for Germany is GS1-Germany. This will enable the GS1 organisation to generate the global trade item number (GTIN).

The detailed description of the GS1 standard and its application shall be produced/effected within the framework of appropriate contractual agreements between the contractor and the GS1 organisation.

The customer reserves the right to verify adherence to these requirements.

2.7 Execution of marking

2.7.1 Marking data

The marking data shall be applied in accordance with VG 95024.

2.7.2 Procedure

The marking procedure depends on the surface to be marked and the marking requirements.

Marking shall be permanent, i.e. its durability shall correspond to the service life of the article. Stresses acting on the marking by handling, environmental impact and cleaning must not impair readability or durability.

2.7.3 Location

If possible, the marking location shall be selected so that the marking is clearly visible and readable with the item in service position.

As far as external parts are concerned, attention shall be paid to their signature (principle "camouflage before marking"). Then the parts shall be marked in a concealed position.

Marking by tags shall be limited to cases when another procedure is not applicable due to the nature of the product but it must be ensured that the tag does not impair the use of the article.

2.7.4 Selection of lettering/printing colour/labels

Lettering shall be selected in accordance with DIN 1450 as well as DIN 1451-1 and -3. Marking shall provide as much contrast as possible.

2.7.5 Requirements relating to marking by AIT element in accordance with GS1 standard

As a rule, one-dimensional or two-dimensional data media shall be applied in accordance with the guidelines set forth by GS1 Germany and provide as much contrast as possible. In the case of the GS1 128 bar code, the GTIN and, on a case-by-case basis, the respective serial number or batch number shall always be displayed below the data medium as an eye-readable text.

In the case of the GS1 data matrix, the GTIN shall always be displayed below the data medium. On a case-by-case basis, the respective serial number or batch number shall always be displayed above the GS1 data matrix. If it should not be possible to display eye-readable information because of space reasons, marking may be dispensed with in the case of the GS1 data matrix (see Annex A).

2.8 Impairment of the supply items by marking

Marking procedures, means of marking and coatings shall match the respective product. They shall neither damage or adversely affect the product nor impair its usability.

2.9 Impairment of the environment by marking

When selecting the marking procedures and materials, the prohibiting regulations for hazardous substances as well as the respective occupational safety and health regulations shall be observed.

Prohibited substances (e.g. cadmium compounds) must not be used. Noxious substances and/or materials adversely affecting soil or waters should neither be used unless permitted by the intended use.

3 QUALITY ASSURANCE

3.1 Quality inspection

It is presupposed that the contractor ensures the fulfilment of the technical requirements by conducting item-related delivery acceptance tests and documenting the results (refer to paragraph 3.2).

Readability of the selected AIT design shall be verified in accordance with EN ISO/IEC 15416 and shall result in an overall rating of class C as a minimum.

3.2 Contractor quality control

The contractor shall inspect the supplies and/or services rendered for contractual compliance, document the result and forward it to the customer.

The conformity check of readability and data content in accordance with GS1 standard may be effected either by means of certification by GS1 Germany or by means of a test tool qualified for this test.

3.3 Government quality assurance

Not applicable, unless otherwise specified in the contract.

In the case of items subject to government quality assurance (GQA), marking shall also be subject of GQA, since marking is part of the item.

4 TERMS

The following packaging terms are defined in STANAG 4279-AAP -23 and described in the Bundeswehr terminology database.

Manufacturer data

Manufacturer data identify the manufacturer of a product delivered to the Bundeswehr. The manufacturer data may consist of the NATO supply code for manufacturers, the trade name or the logo (symbols or reference designation) (see Annex B). The supply code for manufacturers shall be preferred.

Equipment

Technical item forming a self-contained mechanical and/or electrical unit comprising assemblies, component parts, structural items or individual parts.

Assembly

Component of an item of equipment comprising individual or grouped parts.

Individual part

Item which cannot be disassembled further without destruction.

Spare parts

Consumable goods (individual parts or assemblies) replacing components of supply items in order to restore their usability or completeness.

Pack

As a rule, packages combined in box pallets or on flat pallets for the purpose of efficient handling during transport.

Packaging means

Product made of packaging material which is designed to wrap or enclose the packaged items, making them ready for shipment and storage.

In the Bundeswehr, packaging means are categorised as follows:

- disposable packaging means (assigned to consumption and use), e.g. cardboard boxes, bags, cans etc.
- reusable packaging means/shipping and storage containers (SSCs), belonging to a specific group of items, e.g. containers, boxes, hazardous goods packagings
- intermediate bulk containers (IBCs)/auxiliary transport and storage means for shipment and storage, e.g. pallets, boxes, containers.

Product

Collective term for all designations such as defence materiel, equipment, kit as well as hardware and software.

Set

Dedicated combination of several supply items into a unit which is declared a supply item (nonexpendable items).

Note:

In general, the types of sets differing with respect to contents, intended use, and assignment are described in detail by respective word combinations of the project reference names or by the item names, e.g.

- tool set/tool kit
- adaptation set/adaptation kit, conversion set/conversion kit.

Part number

Number or marking used to identify a product or to identify a product either alone or in combination with other part numbers.

Part numbers are e.g.:

- the part number, drawing number, model number or type number or the brand name of a manufacturer,
- the number of the drawing or specification of a manufacturer covering specific sources of supply,
- the identification mark of a specification or standard or a part number, drawing number or type number cited therein,
- the stock number.

Supply item

Catalogued defence materiel required for Bundeswehr supply and procured, stockpiled or resupplied repeatedly for this purpose.

Note:

A supply item may be:

- one single product,
- two or more products which are functionally fully interchangeable or which may serve as a replacement for a specific purpose and may be regarded as an equivalent with respect to their operational conditions,
- a product which is subject to stricter requirements than the normal product of the same type (e.g. selection on the basis of smaller tolerances, special characteristics, highest quality etc.),
- a product with a specific modification as compared to normal products of the same type (implemented either by the user himself or on his request).

Item name

Designation assigned during the cataloguing of a supply item.
The officially required notation of an item name (sequence of words and spelling) shall be adhered to.

Stock number

Thirteen-digit number of a product assigned to one or more products of the same type, the identification of which is approved by the Federal Materiel Cataloguing Centre.

It comprises

- the four-digit stock class number and
- the nine-digit identification number.

The first two digits of the identification number identify the country assigning the stock number.

Example: 5120-12-126-3327

Running spare parts

Spare parts carried with an item of equipment permanently or occasionally as well as works and consumable materials required in order to maintain the operability of the equipment in service.

Note:

Running spare parts and accessory parts may be combined to a group "Accessory parts and running spare parts" of an item of equipment.

Accessory parts

Accessory parts or tools required for the full operability of the equipment within its intended use which are loose or easily removable and carried with an equipment permanently or occasionally.

Note:

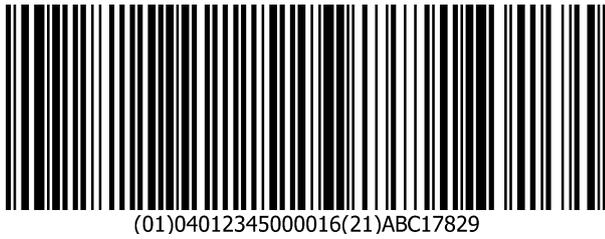
Running spare parts and accessory parts may be combined to a group "Accessory parts and running spare parts" of an item of equipment.

Annex A

AIT elements

Example - supply item with GTIN 4012345000016 and serial number ABC17829 - implementation in GS1-128 bar code

Figure A1: Example of a GS1-128 bar code with GTIN and serial number



Example - supply item with GTIN 4012345000016 and serial number ABC17829 - implementation in GS1 data matrix

Figure A2: Example of a GS1 data matrix with GTIN and serial number



Figure A3: Direct marking of a supply item with GS1 data matrix



Annex B

Marking examples

Figure B1: Marking of a product (here: lead-acid battery)

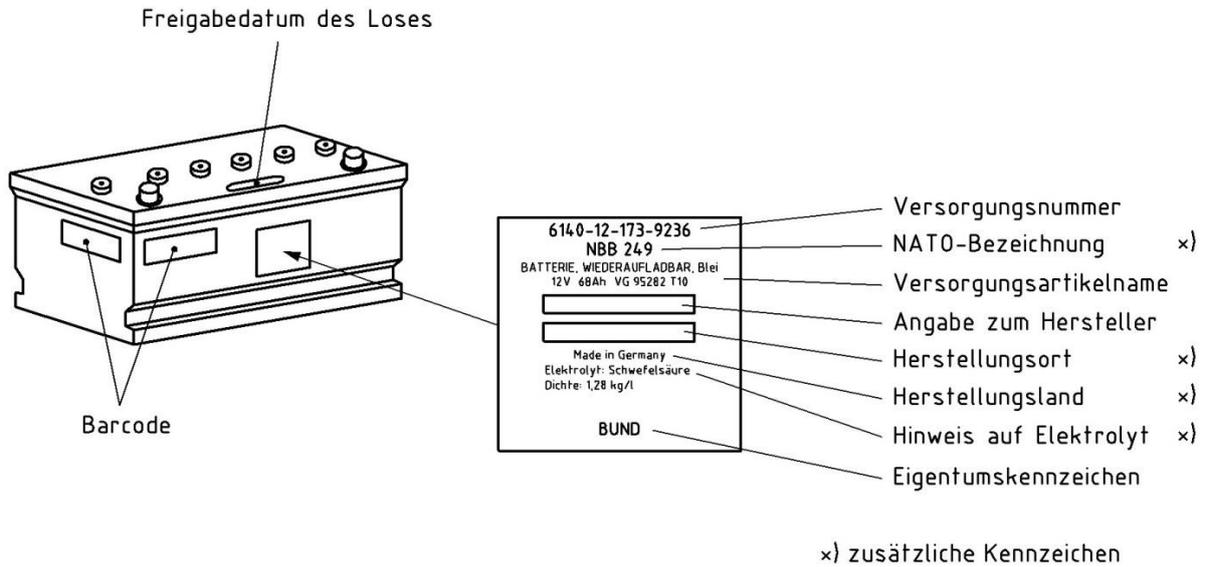
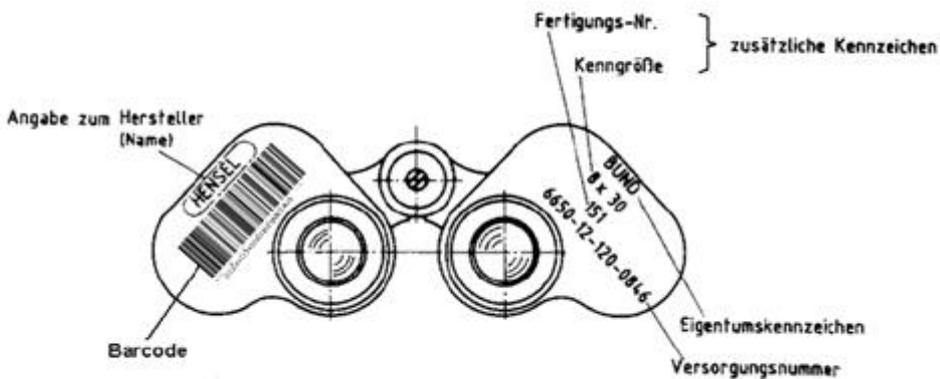


Figure B2 Marking of a product (here: binoculars)



Marking of a supply item using the GS1-128 bar code

Figure B3: Marking of packaging means
 (here: storage box with contents, e.g. box i.a.w. TL A-0004)

Bar code = GS1-128 bar code

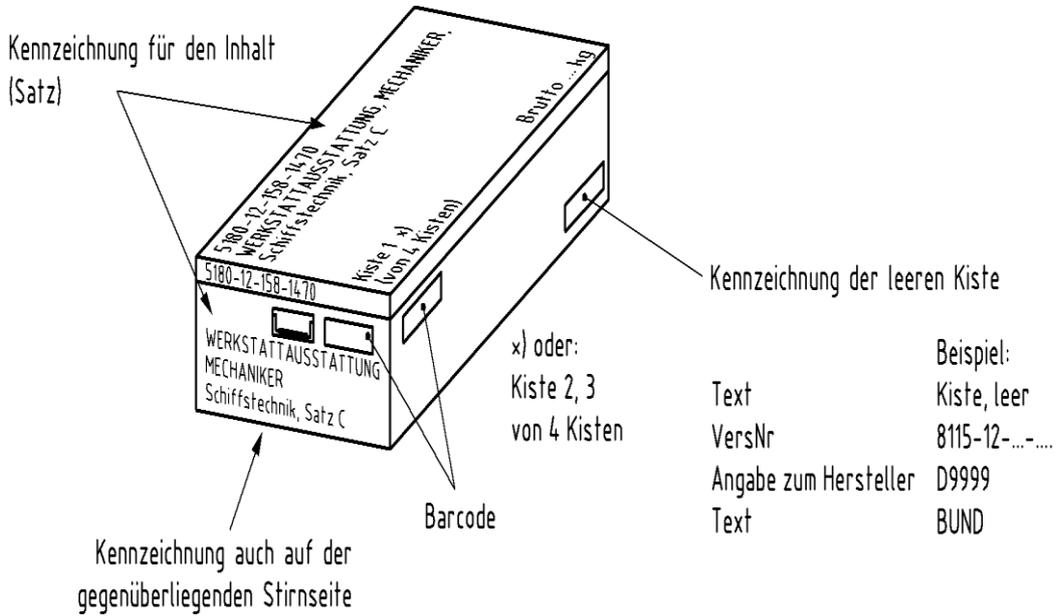
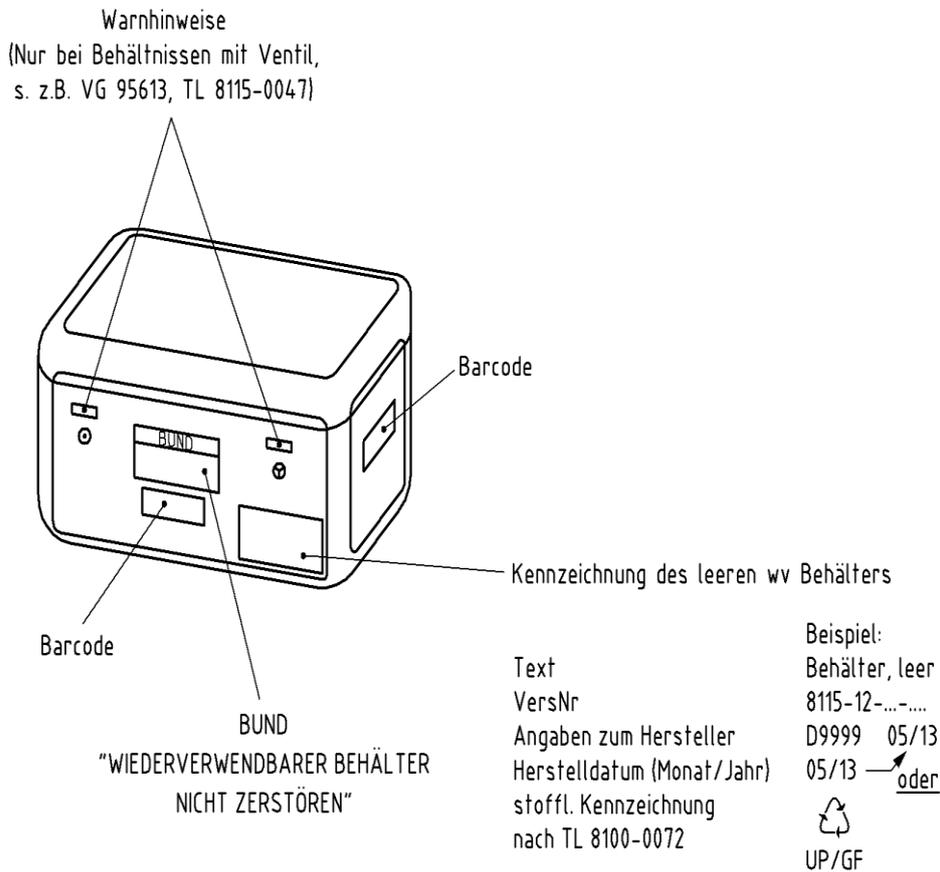


Figure B4: Marking of reusable packaging means
 (here: water-vapourproof reusable container, empty, e.g. plastic container in accordance with VG 95613)



Glossary:

Figure B1:

Freigabedatum des Loses	batch release date
Barcode	bar code
Versorgungsnummer	stock number
*) NATO-Bezeichnung	*) NATO designation
Versorgungsartikelname	item name
Angaben zum Hersteller	manufacturer data
*) Herstellungsort	*) place of manufacture
*) Herstellungsland	*) country of manufacture
*) Hinweis auf Elektrolyt	*) reference to battery acid
Eigentums Kennzeichen	property mark
*) zusätzliche Kennzeichen	*) additional identification marks

Figure B2:

Fertigungs-Nr.	production number
KenngroÙe	optical parameter
zusätzliche Kennzeichen	additional identification marks
Angabe zum Hersteller (Name)	manufacturer's name
Eigentums Kennzeichen	property mark
Versorgungsnummer	stock number

Figure B3:

Kennzeichnung für den Inhalt (Satz)	marking of contents (set)
Kennzeichnung der leeren Kiste	marking of empty box
WERKSTATT AUSSTATTUNG, MECHANIKER Schiffstechnik, Satz C	TOOL SET, GENERAL MECHANIC'S naval engineering, set C
Beispiel	example
Text Kiste, leer	text box, empty
VersNr 8115-12-.....	stock number 8115-12-.....
Angaben zum Hersteller	manufacturer D9999
Text BUND	text BUND (BUNDESWEHR)
Kennzeichnung auch auf der gegenüberliegenden Stirnseite	marking also on oppsite face
Barcode	bar code
*) oder Kiste 2, 3 bzw. 4 von 4 Kisten	*) or box No. 2, 3 or 4 of 4 boxes

Glossary (continued)

Figure B4:

Warnhinweise (Nur bei Behältnissen mit Ventil, s. z.B. VG 95613, TL 8115-0047)

caution notes (for containers with valve only, see e.g. VG 95613, TL 8115-0047)

Barcode

bar code

Kennzeichnung des leeren wv Behälters

marking of the empty reusable container

Beispiel

example

Text Behälter, leer
 VersNr 8115-12-.....
 Angaben zum D9999
 Hersteller
 Herstelldatum 05/13 oder
 (Monat/Jahr)

text container, empty
 stock number 8115-12-.....
 manufacturer D9999
 data
 date of 05/13 or
 manufacture
 (month, year)

stoffl. Kenn-
 zeichnung nach
 TL 8100-0072 UP/GF

marking of
 material i.a.w.
 TL 8100-0072 UP/GF

BUND

BUND (BUNDESWEHR)

WIEDERVERWENDBARER BEHÄLTER
 NICHT ZERSTÖREN

REUSABLE CONTAINER
 DO NOT DESTROY

Annex C

Special marking requirements for hoses and hose assemblies made of elastomeric or thermoplastic materials (material group class 4720) used in fluid power systems as well as for refuelling and pipelines

- Continuation sheet of the invitation for offers, reference no.: / / /
- Continuation sheet of order no.: / / ; Annex to the order

Scope: These marking and permissible age requirements at the time of delivery apply to products to be offered/delivered in case the applicable delivery specifications (VG standards, DIN EN standards, drawings etc.) do not clearly specify such requirements. The requirements correspond to the product-related state-of-the-art condition.

The rules specified hereinafter are part of the offer/order.

C1 Marking

Irrespective of the other applicable requirements (VG standards, DIN EN standards, drawings etc.), the goods shall be permanently and clearly marked with the following minimum data:

- 1.1 Hoses and hose assemblies for refuelling and pipelines
- 1.1.1 Hoses: Continuous marking at a maximum distance of 4 m, i.e. short designation of hose (in accordance with hose standard/specification), reference designation of the manufacturer, and month and year of manufacture.
- 1.1.2 Hose assemblies: Marking on ring-type metal strips and/or on a hose fitting (embossing, engraving or the like), i.e. reference designation of the manufacturer/finishing company, stock number, property mark "BUND". If, in case of shorter lengths (less than 4 m), the marking on the bulk stock hose is missing or incomplete, an additional marking (metal strip, plastic sleeve or the like), also permanently and easily recognisable, shall be applied.
- 1.1.3 Hoses which are delivered as bulk stock and can be reprocessed at a later stage shall be marked in accordance with this TL by an AIT element consisting of the GS1 data identifier GS1-DB (01) (Global Trade Item Number (GTIN)) and GS1-DB (10) (batch number).
- Hoses (sleeve hoses) which are delivered as a finished product shall be marked in accordance with this TL by an AIT element consisting of the GS1 data identifier GS1-DB (01) (Global Trade Item Number (GTIN)) and GS1-DB (21) (serial number).
- 1.1.4 During the data transfer in accordance with TL A-0032 Part 5, the VG part number shall be entered in column 3 for VG materiel.
- 1.2 Hoses and hose assemblies for fluid power systems/hydraulics
- 1.2.1 Hoses: Continuous marking at a maximum distance of 500 mm, with short designation of hose (in accordance with hose standard/hose specification), reference designation of the manufacturer, with month and year or quarter and year of manufacture.
- 1.2.2 Hose assemblies: Marking on ring-type metal strips and/or on the hose fittings (embossing, engraving or the like), i.e. marking of reference designation of the manufacturer/finishing company, stock number/part number, maximum admissible operating pressure of the hose assembly in bar, and month and year of manufacture.
- If, in case of shorter lengths (less than 500 mm), the marking as specified in paragraph 1.2.1 on the bulk stock hose is missing or incomplete, an additional marking (metal strip, imprint or the like), also permanently and easily recognisable, shall be applied in addition.

- 1.2.3 Hose assemblies shall be marked in accordance with this TL with an AIT element consisting of the GS1 data identifier GS1-DB (01) (Global Trade Item Number (GTIN)) and GS1-DB (21) (serial number).
- 1.2.4 During the data transfer in accordance with TL A-0032 Part 5, the VG part number shall be entered in column 3 for VG materiel.

C2 Maximum admissible age

At the date of receipt by the consignee, the admissible age of the goods, specified and limited as follows, must not be exceeded.

- 2.1 Hoses and hose assemblies for refuelling and pipelines
 - 2.1.1 Hoses and hose assemblies in accordance with VG 95924-1-4.2: Maximum admissible age: 24 months.
- 2.2 Hoses and hose assemblies for fluid power systems/hydraulics
 - 2.2.1 Hoses in accordance with VG 95924-2-4.2: Maximum admissible age (Table 2.1): six quarters.
 - 2.2.2 Hose assemblies in accordance with VG 95924-2-4.2: Maximum admissible age (Table 3.1): two quarters.