	Technische Lieferbedingungen	TL A-0032
	Kennzeichnung Kennzeichnen der Versorgungsartikel	Teil 1
	Identification; marking of supply items	Ausgabe: Issue: 6
		Datum: Date: 12. Aug. 2013
		Seite Page 1 bis to 15 deutsch English

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
Topicality check of this Technical Specification (TL) is required.

Änderung gegenüber der letzten Ausgabe Change with respect to the previous issue		Frühere Ausgabe Previous issue(s)	2	3	4	5
		Frühere Ausgabemonate Previous date(s) of issue	08.81	06.94	02.01	03.08

Content

NORMATIVE REFERENCES

- 1 GENERAL
- 1.1 Scope
- 1.2 General technical-organisational requirements

2 TECHNICAL REQUIREMENTS

- 2.1 Marking of individual products
- 2.2 Marking of equipment and / or assemblies
- 2.3 Marking of products used as components of sets
- 2.4 Marking of storage containers
- 2.5 Marking of reusable containers
- 2.6 Marking of hoses and hose assemblies
- 2.7 Automatic identification technology (AIT)
- 2.8 Execution of marking
- 2.9 Impairment of the supply items by marking
- 2.10 Impairment of the environment by marking

3 QUALITY ASSURANCE

- 3.1 Quality inspection
- 3.2 Contractor quality control
- 3.3 Government quality assurance

TERMS

- Annex A AIT elements
- Annex B Marking examples
- Annex C Special marking requirements for hoses and hose assemblies

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 Schriften
- 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 General specification
- 2) STANAG 4279 - AAP-23 NATO Glossary of packaging terms and definitions
- 3) TL A-0032 Part 2 Packaging - Marking of packages - Packing levels S, A, B, C
- 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

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.

Example:

Marking of food in accordance with German Food and Feed Law.

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 for 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.

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 data on measuring and test equipment which shall be provided with a stick-on label according to 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.

1.2.4 AIT elements (GTIN, serial number or batch number) products shall not be marked as specified in Section 2 under the following conditions:

- The usability of the products is impaired by the marking.
- The products are too small or their nature excludes marking.
- The products are small bulk items (e.g. standard parts, electrical components or piece parts etc.).

In these cases, the unit package (the smallest package) shall be marked with the data according to 2.1 a).

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 figure (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 when 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 (GTIN AIT element, serial number or batch number)

This consists, as a minimum requirement, of the GTIN AIT element indicating the data identifier DB 01 as well as either the data identifier DB 10 or DB 21 as previously determined by the material manager for operational viability / project manager, provided this information is given in the contract annexes.

In addition to the marking task, the marking data shall be forwarded to the material manager for operational viability / project manager. This electronic delivery of data¹ may be effected in the form of an editable list or via a data exchange agreement.

¹ As a rule, an electronic delivery of data will be effected by the contractor. The GS1 GTIN is not to be considered an isolated data element, but be viewed in the context of logistic master data, in particular in connection with the serial / batch number and / or the GS1 data identifiers 21 or 10.

2.2 Marking of equipment and / or assemblies / easily interchangeable parts

2.2.1 Equipment and / or assembly used as individual product

In case an item of equipment and / or an assembly / easily interchangeable part comprises only one product, this product shall be marked as supply item i.a.w. paragraph 2.1.

2.2.2 Equipment and / or an assembly / easily interchangeable part comprising several components / products

In case of equipment and/or an assembly / easily interchangeable part each comprising several components, the marking i.a.w. paragraph 2.1 shall be applied only to such parts not constituting products with an own stock number.

The following shall apply to noncatalogued products: When all components of a composite item of equipment and / or assembly / easily interchangeable part are products with an own stock number, the composite item of equipment and / or assembly / easily interchangeable part shall be identified by an equipment plate.

2.2.3 Equipment and / or assemblies comprising accessory and / or spare parts

The requirements specified in paragraph 2.3 analogously apply to equipment and / or assemblies / easily interchangeable parts comprising accessory and/or spare parts.

2.3 Marking of products used as components of sets

2.3.1 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 2.4.

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

2.3.2 Components of sets in storage containers

Components of sets in storage containers shall be marked in accordance with paragraph 2.4. 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, when a general account is impaired by the great number or shape of the supply items.

In case of sets stored in several containers, the container named "Case No. 1" (see paragraph 2.4) shall additionally hold a complete list of all components of the set, assigned to the individual containers, as well as of those stored outside the storage containers (see paragraph 2.5.2).

2.3.3 Components of sets outside storage containers

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

2.4 Marking of storage containers

2.4.1 Storage container, empty

Empty storage containers as products shall be marked on the front face on the lower right with the data according to paragraph 2.1 (for an example see figure B.3).

2.4.2 Storage container with contents

Apart from the marking according to paragraph 2.4.1, storage containers used for continuous storage, e.g. storage containers for tool sets, shall additionally be provided with a marking of the contents at 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 2.7
- 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.

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

2.5 Marking of reusable containers

2.5.1 Reusable containers, empty:

These containers shall be marked in accordance with paragraph 2.5.2 below (for an example see Figure B.4).

2.5.2 Reusable transport and storage containers with special retaining device / cushioning

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

Example:

Stock number / part number

Text: "container with retaining device / cushioning"

Manufacturer data

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

Text: "consisting of"

Text: "container empty" with stock number or part number

Text: "retaining device" with stock number or part number

8145-12-999-9999 Behälter mit Halterung/ Polsterung
D 9999
bestehend aus
- Behälter 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

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

2.6 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 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.

For delivery specifications not clearly including these requirements (DIN EN standards, drawings etc.), they are summarised in a continuation sheet of the invitation for bids / order, see Annex C of this TL.

The continuation sheet of the invitation for bids / order (Annex C) is mandatory for all procurements of hoses and hose assemblies, Stock Class 4720.

2.7 Automatic identification technology (AIT)

2.7.1 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).

2.7.2 AIT standard

As a rule, AIT shall be implemented on the basis of the GS1-128 standard in the form of the one-dimensional bar code.

2.7.2.1 GS1 data identifier

The content for the implementation of the GS1 128 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 the
- GS1 data identifier (21) serial number.

The decisions on how to mark the items, in particular on how to mark packs, will be notified by the customer as additional contractual requirements (AIT marking for batch, AIT marking for initial production batch, AIT marking for pack).

In addition, the GS1 data identifier (00) serial shipping container code (SSCC) shall be used as AIT designation for transport activities. Its implementation will be the subject of a separate order by the customer and is not the subject of this TL.

2.7.2.2 AIT special cases

For special cases, identification may be ensured by

- the GS1 data matrix as standard two-dimensional AIT element (e.g. in case of space restrictions, content identical with above-mentioned GS1 data identifier)
- 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).

2.7.3 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 128 standard (or GS1 data matrix codes, radio frequency identification (RFID), etc) and their application, the technical implementation as well as the support of registered users etc 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.

2.8 Execution of marking

2.8.1 Marking data

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

2.8.2 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.

2.8.3 Location

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

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.

2.8.4 Selection of lettering / printing colour / labels

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

2.8.5 Requirements relating to marking with AIT element (bar code) in accordance with GS1 128

As a rule, bar codes shall be applied in accordance with the guidelines set forth by GS1 Germany and provide as much contrast as possible. The content of the bar code shall be displayed below the bar code as an eye-readable text (see Annex A).

Cases and containers shall be marked with an AIT element at the end faces and on the adjacent right side face (see Annex B).

2.9 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.

2.10 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).

3.1.1 Type testing

Only bar code markings which, according to the contractual requirements, must match the service life of the product shall be submitted to WIWeB (Bundeswehr Research Institute for Materials, Fuels and Lubricants) for type testing.

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

In order to check the conformity of the bar code, a specimen print shall be submitted on a supply item or a material specimen to WIWeB GF320, Institutsweg 1, 85435 Erding; email: wiwebgf320posteingang@bundeswehr.org before series production.

3.1.2 Delivery acceptance inspection / test

AIT marking shall be subjected to government quality assurance only when one of the packing levels A, B, or C or when application of government quality assurance has been contractually agreed.

Completeness and legibility of the bar code information content shall be verified by the contractor to the government quality assurance authority. In this context, legibility shall receive an overall rating of class C in accordance with EN ISO/IEC 15416.

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.

3.3 Government quality assurance

Not applicable, unless otherwise specified in the contract.

4 TERMS

The following packaging terms are defined in STANAG 4279-AAP -23.

Manufacturer data

Manufacturer data identify the manufacturer of a product delivered to 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, i.e. an item to which the criteria of a project in the sense of the procurement of spare parts for material do not apply.

The following packaging terms are defined in Bundeswehr Joint Service Regulation ZDv 30/41 (obtainable at the competent Bundeswehr quality assurance office).

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.

Easily interchangeable parts

(Abbreviation in German: LAE).

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.

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 identifying 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.

Item name

Designation assigned during the cataloguing of a supply item. The SHORT ITEM NAME may be complemented by a delimitation, i.e. by adding additional, identifying characteristics.

Example: HAMMER, HAND-² Vorschlaghammer mit Stiel
(short item name) (delimitation)

² The officially required notation of a short 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 an intended use which are loose or easily removable and carried with an equipment permanently or occasionally.

Note:

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

Annex A

AIT elements

Example - AIT elements GS1 128

A) DB 01 + DB 21 corresponds to a global trade item number (GTIN) plus serial number



B) DB 01 + DB 10 corresponds to a global trade item number (GTIN) plus batch number



The GTIN of the trade item comprises the data identifier (01), the global location number (GLN - corporation identifier), the item number and the check digit.

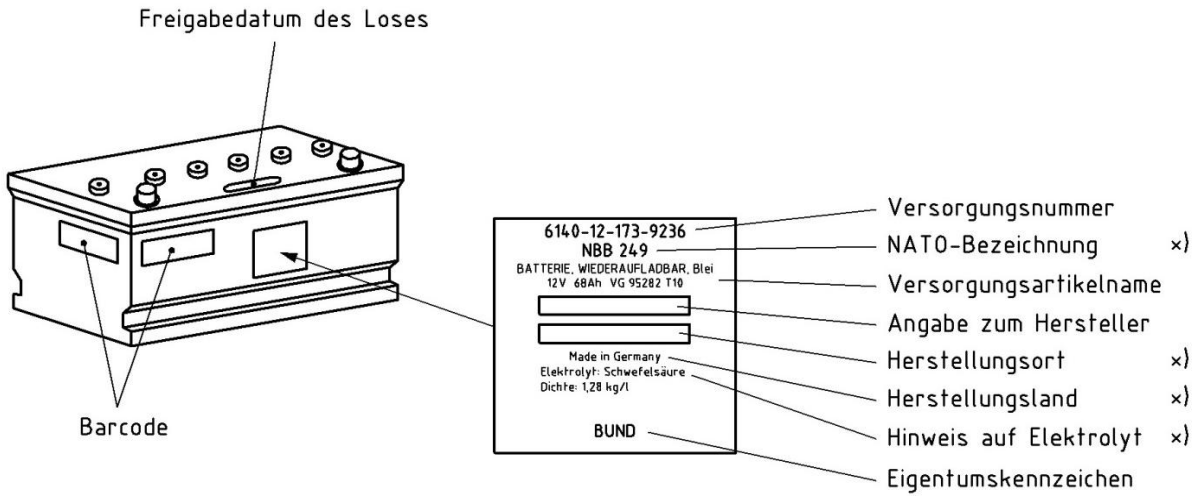
The global location number (GLN) will be assigned by the respective national GS1 organisation³, the item number shall be assigned by the contractor himself and the check digit will be calculated by means of a tool.

³ The GS1 organisation for Germany is GS1-Germany.

Annex B

Marking examples

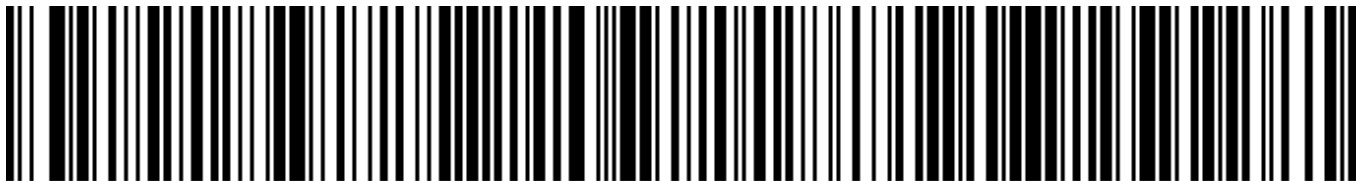
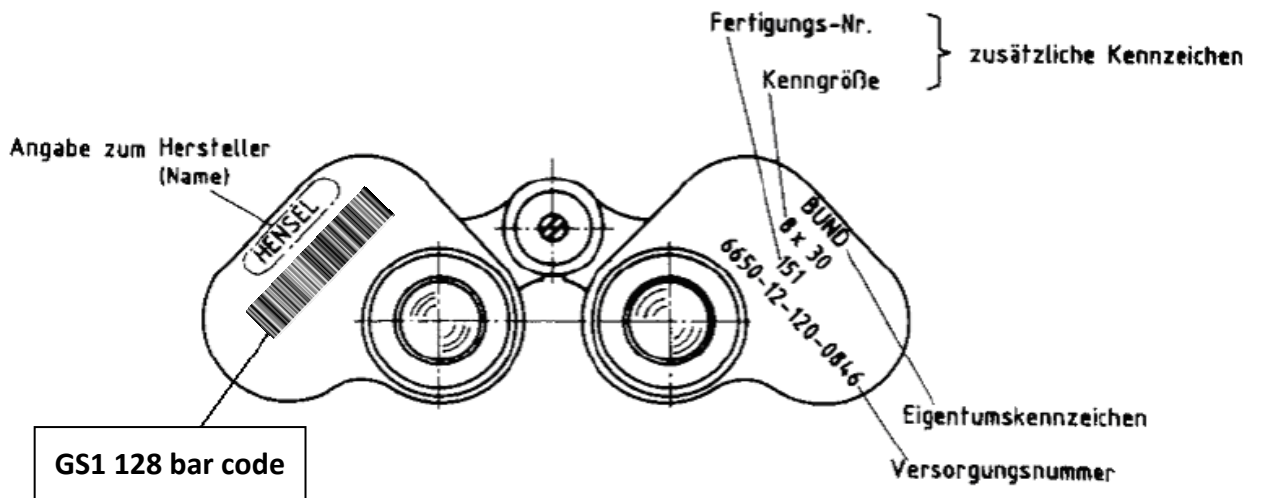
Figure B.1 Marking of a product (here: lead-acid battery)



x) zusätzliche Kennzeichen

Figure B.2 Marking of a product (here: binoculars)

Bar code designation



(01)04051123001562(21)ABUK2451LM

**GTIN:
4051123001562**

**Serial number:
ABUK2451LM**

Figure B.3 Marking of storage containers
(here: storage box with contents, e.g. box i.a.w. TL A-0004)

Barcode = GS1 128 bar code

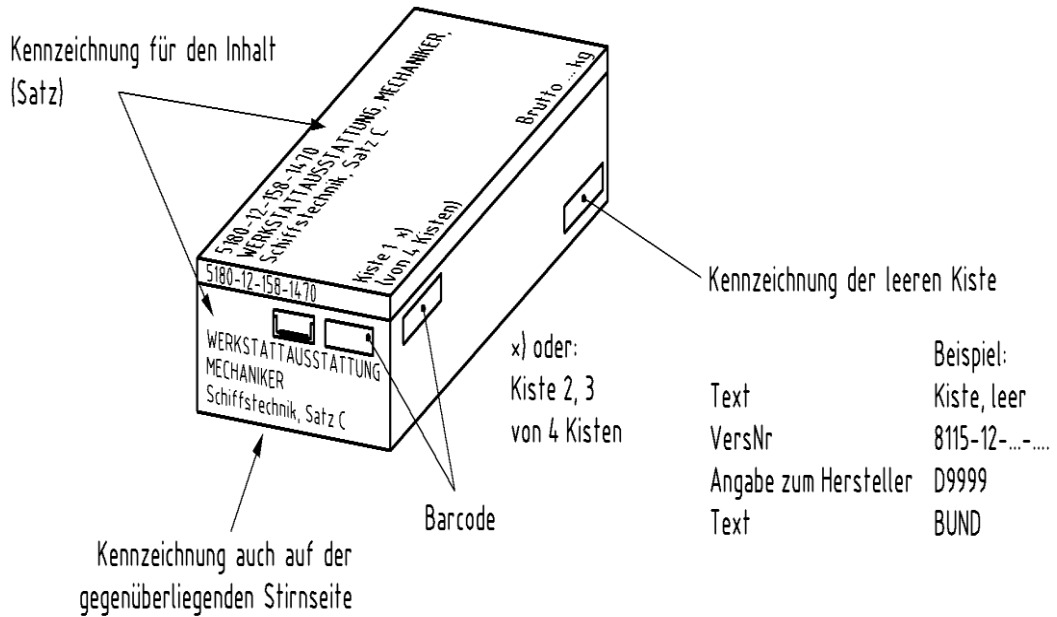
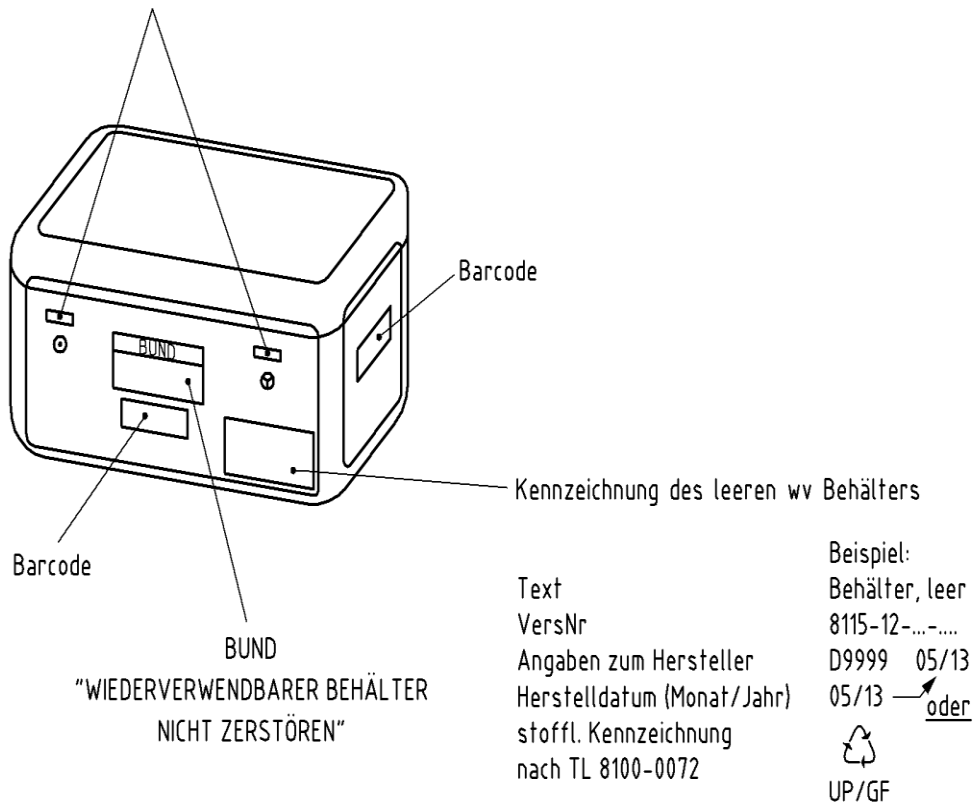


Figure B.4 Marking of reusable containers (here: water-vapourproof reusable container, empty, e.g. plastic container in accordance with VG 95613)

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



Glossary:Figure B.1:

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
Eigentumskennzeichen	property mark
*) zusätzliche Kennzeichen	*) additional identification marks

Figure B.2:

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

Figure B.3:

Kennzeichnung für den Inhalt (Satz)	marking of contents (set)
Kennzeichnung der leeren Kiste	marking of empty box
Beispiel	example
Text	text
VersNr	stock number
Angaben zum Hersteller	manufacturer data
Text	text
Kennzeichnung auch auf der gegenüberliegenden Stirnseite	marking also on oppsite face
Barcode	bar code
*) oder Kiste 2, 3 bzw. 4 von 4 Kisten	*) or case No. 2, 3 or 4 of 4 cases

Glossary (continued)

Figure B.4:

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	text	container, empty
VersNr	8115-12-.....	stock number	8115-12-.....
Angaben zum Hersteller	D9999	manufacturer data	D9999
Herstelldatum (Monat/Jahr)	05/13 <u>oder</u>	date of manufacture (month, year)	05/13 <u>or</u>
stoffl. Kennzeichnung nach TL 8100-0072	UP/GF	marking of material i.a.w. TL 8100-0072	UP/GF
BUND		BUND (BUNDESWEHR)	
WIEDERVERWENDBARER BEHÄLTER		REUSABLE CONTAINER	
NICHT ZERSTÖREN		DO NOT DESTROY	

Annex C

Special marking requirements for hoses and hose assemblies

Marking of hoses and hose assemblies used in fluid power systems as well as for refuelling and pipelines

Admissible age at the time of delivery of hoses and hose assemblies made of elastomers used in fluid power systems as well as for refuelling and pipelines (Stock Class 4720)

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

Scope: These requirements 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.

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 (according to 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.

1.2 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.

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

These provisions are part of the offer and order.