

Group standard

VW 01155

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Vehicle Parts

Approval of First Supply and Changes

Preface

This Standard contains a normative appendix that describes the requirements for the preparation of material data sheets in the International Material Data System (IMDS) and Material Information Sheet System (MISS).

Previous issues

VW 01155: 1988-01, 1995-12, 1999-10, 2000-12, 2004-06, 2005-02, 2006-01, 2009-10, 2009-11, 2011-06

Changes

The following changes have been made to VW 01155: 2011-06:

- Extended to include all parts of a vehicle

Verify that you have the latest issue of the standard before relying on it.

This electronically generated standard is authentic and valid without signature.

The English translation is believed to be accurate. In case of discrepancies, the German version is alone authoritative and controlling.

Numerical notation acc. to ISO/IEC Directives, Part 2.

Page 1 of 7

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Contents

	Page
1	Scope 2
2	Requirements 2
3	Applicable documents 3
4	Bibliography 3
Appendix A	Requirement for material data sheets (MDSs) in the International Material Data System (IMDS) and Material Information Sheet System (MISS) 4
A.1	Aim 4
A.2	Scope 4
A.3	Symbols 4
A.4	Rules 5
A.4.1	General errors 5
A.4.2	Formal errors 6
A.4.3	Content errors 7
A.5	Additional information 7

1 Scope

This Standard specifies the approval of the first supply of vehicle parts and changes to vehicle parts.

2 Requirements

The specifications in drawings and in Standards (in particular in-house standards such as Technical Supply Specifications (TL), Test Specifications (PV), Volkswagen Standards (VW)) describe requirements that must be met by the item to be supplied.

The "envelope" tolerancing principle as per VW 01054 "Engineering Drawings, Dimensioning" applies to all drawings of the Volkswagen Group first released prior to the publication of this revised issue of VW 01155, and which do not contain a reference to the applicable tolerancing principle.

The supplier must develop an economical maintenance scheme considering state of the art technology and following Design Guideline KR 00020; this includes verification and documentation of maintainability.

The supplier must perform the required tests and provide evidence for first-sample releases and, if requested by the purchaser, for build sample releases.

The basic substance composition of the materials used must be indicated in the International Material Data System (IMDS)¹⁾ or in the Material Information Sheet System (MISS)¹⁾ as per the specifications in appendix A.

The EU Safety Data Sheet in accordance with the Hazardous Substances Ordinance is to be provided for substances, preparations, and products that are classified as "hazardous" as per the European Hazardous Substances Regulations.

The supplier must provide recycling and recovery solutions (completion of material cycles) or ways of disposal for the respective product (see VW 91102 Supplement 3 "Environmental Standard for Vehicles; Requirements for a Processing Concept"). Obligations arising from treatment, documentation, and recycling regulations from sectors outside the automotive industry must be assumed by the supplier.

1) IMDS is to be used by external suppliers, MISS by internal suppliers.

For items being supplied that are subject to type approval, the part operating permit must be presented to the Type Approval Department by the appropriate design engineering department without delay.

For the release of the item being supplied, further tests such as functional tests or road tests must be requested prior to production supply.

Changes of the supply item, for example in the design, the material and its composition, the manufacturing process, upstream suppliers, and/or the manufacturing location, require the previous written consent of the ordering party. For this purpose, all of the aforementioned documentation must be provided (analogously to the decision matrix from the new VDA volume 2 "Quality management in the automotive industry – Assuring the quality of supplies – Supplier selection, quality assurance agreements, production process approval and product approval, quality performance in production, declaration of constituents").

Requests for consent to such a change must be submitted in writing to the Procurement Department of the ordering party stating the drawing number/part number.

In the event of a change of the supply item without the prior consent of the ordering party, the supplier is liable in accordance with the agreements for damages resulting to the ordering party, be they direct or indirect.

3 Applicable documents

The following documents cited in this standard are necessary to its application.

Some of the cited documents are translations from the German original. The translations of German terms in such documents may differ from those used in this standard, resulting in terminological inconsistency.

Standards whose titles are given in German may be available only in German. Editions in other languages may be available from the institution issuing the standard.

VW 01054	Engineering Drawings; Dimensioning
VW 01098	Part Number System
VW 91102 Supplement 3	Environmental Standard for Vehicles; Requirements for a Processing Concept
KR 00020	Design Guideline; Maintainability Design of Vehicles, Modules, Sub-Assemblies and Components
VDA 231-106	Material classification in motor vehicle construction - Structure and nomenclature
VDA volume 2	Quality management in the automotive industry – Assuring the quality of supplies – Supplier selection, quality assurance agreements, production process approval and product approval, quality performance in production, declaration of constituents

4 Bibliography

[1] [VW 91101](#)

[2] [VW 99000](#)

Appendix A (normative) Requirement for material data sheets (MDSs) in the International Material Data System (IMDS) and Material Information Sheet System (MISS)

A.1 Aim

This appendix defines the Volkswagen AG criteria for checking and accepting material data sheets (MDSs) from the International Material Data System (IMDS) and Material Information Sheet System (MISS). Adherence to these regulations is to avoid problems in the first-sampling process and prevent the supplier from having to revise the MDSs because they have been rejected by Volkswagen AG.

The MDSs must correspond to the conditions and rules of the IMDS Recommendation [IMDS 001]. If new or revised materials are contained in an MDS, the MDS must be checked and updated if necessary.

If there is a change in the Global Automotive Declarable Substance List (GADSL), all MDSs with substances marked confidential or jokers/wildcards must be checked. If these substances are declarable or prohibited, they must be disclosed in the resubmission.





If revision is necessary, the latest IMDS Recommendations apply.

A.2 Scope

This Standard applies to all substances, preparations, and products supplied to the customer with the vehicle. The data are part of the first-sample test report. They must be available in full by the time of the first-sample test in form of accepted MDS.

A.3 Symbols

Table A.1

	<p>Individual part or assembly (ASSY): If the red square stands for an ASSY, the next level may only contain red squares (the parts of the ASSY).</p>
	<p>Semi-finished product: Semi-finished products are pre-products that will be subsequently processed. In the next level of the structure tree, they can be composed of other semi-finished products or of materials. The semi-finished symbol must be used, e.g., for roll stock, sheet steels with a defined thickness, glass mats, and blanks.</p>
	<p>Material: Materials can be described by other materials (in the case of composite materials) or by basic substances in the next level. Materials must be described in the condition they will have in the final product.</p>
	<p>Basic substance: Basic substances are not necessarily chemically pure substances; they can also be mixtures for which there is no need to differentiate the individual components.</p>

A.4 Rules

Each part, each semi-finished product, and each material must be completely and correctly described by its MDS in its final condition (e.g., adhesives and paints in cured condition).

The data sheet will be rejected if one of the aspects mentioned in [section A.4.1](#), [section A.4.2](#), and [section A.4.3](#) applies²⁾:

A.4.1 General errors

– **Part number missing or wrong**

The Volkswagen part number as per [VW 01098](#) must be entered in the MDS on the "Recipient status data" page.

– **Part designation missing or wrong**

The designation of the part/semi-finished product as per the Volkswagen drawing or CAD file must be entered in the MDS on the "Recipient status data" page in German or English. It is possible to extend the designation by additions for a more detailed description. However, the designation from the drawing/CAD file must be included.

– **Drawing number and/or drawing version missing or wrong**

The drawing number and drawing version (version/date) from the Volkswagen drawing must be entered in the MDS on page "Recipient status data". The drawing version must be entered in the format YYYY-MM-DD (e.g., 2003-02-01). If drawing number and/or drawing version does not exist, "-" or "not existent" must be entered.

– **Supplier number missing, wrong or unknown**

The Data Universal Numbering System (DUNS) number of the supplier must be entered in the MDS on the "Recipient status data" page³⁾. For the DUNS number to be accepted, the supplier must have the status "active" in the Volkswagen supplier database. If the status is not active yet, it can be changed accordingly on the supplier platform (<http://www.vwgroupsupply.com/>) via the link "Team up with us".

– **Another part number of a lower version has already been documented under the same IMDS ID.**

Only one part number may be documented in each IMDS ID (regardless of the version) so that the part number/IMDS ID assignment is unambiguous. It must be noted that suffixes and color indices are integral parts of Volkswagen part numbers. If, for example, the part number 1K0.123.456.A is changed to 1K0.123.456.B, a new IMDS ID must be created instead of a new version.

– **The same supplier has already sent an MDS with a different IMDS ID for the specified Volkswagen part number which has been accepted.**

Each Volkswagen part number may only be documented under one IMDS ID per supplier. If a part is changed and the MDS must be updated as a consequence, a new version of the already existing IMDS ID must be created, but not a new IMDS ID.

2) MDS may be excluded from certain tests in justified individual cases.

3) Excerpt from the homepage: http://www.dnbgermany.de/datenbank/duns_nummer.html: The D&B DUNS® number (Data Universal Numbering System) is a nine-digit numerical code. It allows companies to be uniquely identified around the world. [...] The D&B DUNS® number is endorsed and used by organizations such as the German Association of the Automotive Industry (VDA), the Chemical Industry Association (VCI), the European Commission, and the International Standardization Organization (ISO).

A.4.2 Formal errors

- **Different node types are on the same structure tree level.**
 Only one node type may be used on one structure tree level of an MDS, e.g., only part node, semi-finished product node, or material node. The nodes of one structure tree level are connected by a continuous line.
- **The deviation of the calculated weight from the entered weight exceeds the entered tolerance**
 In an MDS, the weight of a single node is automatically summed up and represented as calculated weight. The entered weight is principally the weighed weight of the part (for parts under development it may be the drawing weight), the weight tolerance is the tolerance from the drawing. If the entered weight and the calculated weight differ significantly, it must be checked whether all components of the part are represented in the MDS.
- **The variation ranges of basic substances exceed the values entered in Table A.2⁴⁾**
 Variation ranges must only be used to indicate the real content variations of a basic substance in a material. Variation ranges must not be used to conceal the complete composition of a material.

Table A.2

Basic substance content (lower value in the case of value ranges)	Maximum permissible variation range
≤7,5%	±1,5 percentage points
>7,5% to ≤20%	±2,5 percentage points
>20%	±5 percentage points

- **Wildcard portion + portion of confidential basic substances >10%⁴⁾**
 Up to 10% of a material may be concealed. It can be either marked as "confidential" (only the author of the MDS sees the basic substances in clear text, only the message "confidential contents" will be shown to the recipient) or represented by a wildcard. A wildcard behaves like an explicit basic substance; in other words, neither the author nor the recipient can see which basic substances are hidden behind the wildcard. Documentation for strictly confidential basic substances must be held for 30 years by the supplier.
- **Use of the wildcard "not specified yet"⁵⁾**
 This wildcard indicates that individual components of the material are not known. Therefore, it must only be used in data sheets for sampling during the development phase. At the time of first sampling, all components of all materials must be known.
- **Use of wildcards that are no longer valid**
 Some of the old wildcards are no longer accepted, namely the wildcards "static inhibitors", "biocides", "lubricants", "stabilization UV, light, heat", and "reinforcement/filler". The wildcards "flame retardant", "pigment portion", "impact-resistance modifier", and "plasticizer" should not be used either due to legislation in preparation.
- **Material variation ranges >±10 percentage points around the mean value⁴⁾**
 The portion of material nodes among semi-finished product and material nodes will not be indicated as a weight but as a percentage. As with basic substances, variation ranges can be

4) Only applies to materials with a weight of ≥1 g. Materials from the IMDS Committee, IMDS Committee/ILI Metals and Steel & Iron List as well as MDS for sampling during the development phase are excluded from these tests.

5) MDS for sampling during the development phase are excluded from these tests.

selected that must not be larger than ± 10 percentage points around the mean value. Variation ranges may be used to indicate the real content variations of a material in a material or semi-finished product. Variation ranges must not be used to conceal the complete composition of a material or semi-finished product.

– **Application ID missing or wrong**

If a material of a part contains one or more basic substances whose use is restricted by law, corresponding application IDs must be entered that characterize the purpose of use. The specification of these application IDs must be factually correct.

– **Use of the application ID "Other application (potentially prohibited)"**

Use of this application ID is not permitted.

A.4.3 Content errors

– **The VDA category is not indicated or incorrectly assigned.⁶⁾**

A category as per [VDA 231-106](#) must be assigned to each material (e.g., "3.2 Copper alloys", "5.1.a Filled thermoplastics"). The assignment of this category must be factually correct (e.g., a steel must not be classified as an aluminum alloy).

– **The basic substance composition of materials is not indicated in its final condition**

The basic substance composition of all materials must be indicated in its final condition. This means that paints, adhesives, etc. must be indicated in their cured condition, and only residual concentrations of liquids and reactive substances must exist in other solid materials.

– **Weight of the part is wrong**

The weighed weight must be indicated for each part. If the weighed weight is not known, the part must be weighed or (if this is not possible, e.g., during development) the weight from the drawing must be indicated.

A.5 Additional information

Additional information on the creation of MDS can be found in the IMDS Recommendation 001 in the relevant valid version. To access this directive, log in to IMDS and click on the link "Directives".

A brief version of this supplement can be found on the supplier platform (<http://www.vwgroupsupply.com/>) in the column "Sustainability" under "Product standards → IMDS".

Because the MDS is downloaded from the IMDS and checked once a night, a delay of *one to two working days* between transfer and rejection/acceptance must be planned when transferring the MDS within the scope of first sampling.

⁶⁾ Only applies to materials with a weight of ≥ 1 g. Materials from the IMDS Committee, IMDS Committee/ILI Metals and Steel & Iron List as well as MDS for sampling during the development phase are excluded from these tests.