

Technical Delivery Condition

Control of prohibited and regulated substances

Identification: I_P3210_S_BG_-_003_EN
Index: C

Status:

Effective

Classification:

Public

Page:

1/12



Inhalt

1	Scope of application	2
2	Application purpose	2
3	Purpose	2
4	Control of Prohibited and Regulated Substances	3
4.1	Generall	3
4.2	GADSL Substance classification	3
4.3	End-of-life vehicle directive	4
4.3.1	EU ELV Directive	4
4.3.2	China ELV Directive	4
4.4	REACH regulation	4
4.4.1	Generell	4
4.4.2	Substances of very high concern (SVHCs)	4
4.4.3	List of substances subject to authorization (REACH regulation, Annex XIV)	5
4.5	Additional Restrictions	5
4.5.1	Generell	5
4.5.2	Radioactive substances	6
4.5.3	Biocidal substances	6
4.5.4	Ozone-depending substances (ODS)	7
4.5.5	Persistent organic pollutants (POP)	7
4.5.6	Restriction of hazardous substances in electrical and electronic devices (RoHS)	7
4.5.7	International Honkong-Convention	7
4.5.8	Substances classified as carcinogenic, mutagenic or toxic for reproduction (CMR), Sunstances with endocrine properties	7
4.5.9	Per- und polyfluorinated alkyl compounds (PFAS)	8
4.5.10	Mercury (Hg)	8
4.6	Additional requirements for packaging materials	8
4.6.1	Generell	8
4.6.2	Requirements for packaging materials	8
4.6.3	Tabel 1 – Permitted and non permitted materials	9
4.7	Declaration of substances	9
4.7.1	Generall	9
4.7.2	International Material Datensystem (IMDS) - automotive industry	10
4.7.3	China Automotiv Material Data System (CAMDS)	10
4.8	Safety data sheet (SDB)	10
4.9	Product warning label	10
5	Conflict Minerals	11

Printed version is not subject to change service.

Control of prohibited and regulated substances

Identification: I_P3210_S_BG_-_003_EN
Index: C

Status:**Effective****Classification:**

Public

Page:

2/12

1 Scope of application

Gives the scope of the instruction:

Internal

- Brand, company site Anröchte/ D
- Brand, company site Erwitte/ D
- MFW, company site Lüdenscheid/ D
- BKL-CN, company site Taicang/ CN
- BKL-MX, company site Querétaro/ MX
- BSP, company site Siemianowice Śląskie/ PL

Division

- PT (AS)
- IS (IF)
- SGD (FTT)
- M

External

- N/A
- Supplier
- Customer

2 Application purpose

This brandgroup standard applies to the delivery of production materials. This standard specifies the substances prohibited and regulated by the brandgroup and reporting obligations for all purchased production materials.

The following examples for production materials are covered under the scope of this ZF Company Standard:

- Parts on the bill of material which are part of a product
- Substances or mixtures such as greases, oils, adhesives, soldering pastes, etc. which are part of the product
- Surface treatments, corrosion prevention and coatings, used in the manufacturing process and that remain on or become part of the product

The following examples are not covered under the scope of this ZF Company Standard:

- Substances or mixtures such as fluids for metalworking, shop floor cleaning supplies or oils used in brandgroup production machines which are not considered to be production materials or part of the product
- Articles such as office and general shop floor supplies

Note 1: Some specific requirements may not be applicable for non-automotive products.

Note 2: This standard applies mandatorily for all suppliers and for deliveries within the ZF Group.

3 Purpose

This Standard is a supplement to current laws and regulations. Conformance is the responsibility of both, external and internal suppliers.

Besides the considerations of this Standard, the brandgroup expects all suppliers to continuously monitor changes in worldwide chemical and restricted substance regulations and implement actions, as needed.

Additionally, suppliers are expected to do the reporting of material data and SVHCs as described in the Sections 4.7 and 4.8.

Printed version is not subject to change service.

Control of prohibited and regulated substances

Identification: I_P3210_S_BG_-_003_EN
Index: C

Status:

Effective

Classification:

Public

Page:

3/12

4 Control of Prohibited and Regulated Substances

4.1 General

All supplies shall meet applicable legal environmental and import regulations, e.g.:

- EU REACH regulation (EC) No 1907/2006,
- EU ELV directive 2000/53/EC,
- China requirements for prohibited substances on automobiles GB/T 30512:2014
- ...

4.2 GADSL Substance classification

The brandgroup has adopted the substance declarations and prohibitions of the Global Automotive Declarable Substance List (GADSL). The GADSL defines the requirements for prohibited and / or declarable substances.

Substances listed in the GADSL and used in parts and materials shall be identified, reported as described in Section 7, and substituted as possible.

The currently published version of the GADSL applies.

Reportable substances shown in the GADSL have a classification of "P" or "D" (definition see below).

Depending on its specific application, the same substance could be classified "P" in one end use, and "D" in another end use. When this is the case, both classifications for the substance will be shown on the GADSL with examples under the application column. Declaration (reporting) thresholds are defined by the specific application of the substance.

Any reportable substances below the declaration threshold do not have to be reported. Unless otherwise indicated, these declaration thresholds lie at a mass fraction of 0.1% of the homogeneous material, not of the component or assembly.

- **„P“ = Prohibited**
A substance designated with "P" is either prohibited by regulation for use in certain applications or may not exceed regulated threshold limits. "P" substances in GADSL shall not be used in supplies to ZF unless specific exemptions apply.
- **„D“ = Declarable**
A substance designated with "D" must be declared if it exceeds its defined threshold limit.

Since some "D" substances are potential candidates for "P" substances (e.g., substances that are marked with reason code "LR" = "legally regulated" or "FA" = "for assessment"), it is highly recommended not to use "D/LR" or "D/FA" substances, if possible.

"D/FI" substances ("FI" = "for information") are not potential candidates for "P" substances and are acceptable to use.

Printed version is not subject to change service.

Control of prohibited and regulated substances

Identification: I_P3210_S_BG_-_003_EN
Index: C

Status:

Effective

Classification:

Public

Page:

4/12

4.3 End-of-life vehicle directive

4.3.1 EU ELV Directive

Changed areas of application and expiry dates of the material and component exceptions, which are related to the date of the respective vehicle type approval, are contained in the changes to Directive 2000/53/EC, Annex II and must be adhered to for deliveries to the automotive industry.

4.3.2 China ELV Directive

Deliveries for vehicles type-approved in China must comply with GB/T 30512:2014.

4.4 REACH regulation

4.4.1 Generell

Suppliers based in the EU or importing into the EU must ensure that substances in articles and mixtures are registered and approved in accordance with Regulation (EC) No. 1907/2006 (REACH regulation) for the intended uses and periods.

Importers and producers of articles containing substances restricted under regulation (EC) No 1907/2006, Annex XVII may only continue to place the articles on the EU or European Economic Area (EEA) market if the restriction does not apply to their use.

4.4.2 Substances of very high concern (SVHCs)

Substances of very high concern (SVHCs) on the REACH regulation Candidate List (CL) with a mass fraction of > 0.1% are restricted for newly developed ZF products, including supplied parts and carryover parts for new projects.

Suitable substitutes to CL substances shall be developed.

In cases where the supplier is not able to perform a substitution, he shall inform his contactperson in brandgroup purchasing and secure the necessary approval.

SVHCs shall also be avoided in materials used in the production process, such as Lubricants, oils, cutting fluids, etc.

Suppliers of articles and mixtures containing SVHCs with a mass fraction of > 0.1% shall inform ZF in accordance with regulation (EC) No 1907/2006, Article 33, where legally mandated.

Printed version is not subject to change service.

Control of prohibited and regulated substances

Identification: I_P3210_S_BG_-_003_EN
Index: C

Status:

Effective

Classification:

Public

Page:

5/12

In general, no prohibited substances may be used for packaging materials and packaging. Substances that require declaration should also be avoided. Exceptions must be documented in writing. Packaging of purchased products delivered (chemicals, mixtures, products, packaging, packaging materials and raw materials) must be able to be disposed of in the country of delivery without violating existing laws or returned to the supplier after consultation.

4.4.3 List of substances subject to authorization (REACH regulation, Annex XIV)

Substances contained in regulation (EC) No 1907/2006, Annex XIV are prohibited in supplies to the brandgroup.

For all newly developed brandgroup products, including supplied parts and carryover parts for new projects, as well as for parts being produced after the sunset date¹⁾, suppliers shall develop suitable substitutes to substances contained in regulation (EC) No 1907/2006, Annex XIV.

- 1) Definition of "sunset date" according to Regulation (EC) No. 1907/2006, Article 58, paragraph 1, letter c, point i: " The date from which the placing on the market and the use of the substance shall be prohibited unless an authorization is granted."

In cases where the supplier is not able to perform a substitution, he shall inform his contactperson in brandgroup purchasing and secure the necessary approval.

Substances contained in Regulation (EC) No. 1907/2006, Annex XIV are also prohibited in materials used in the production process, such as: E.g. lubricants, oils, cutting fluids, etc.

The approval for use shall be in accordance with legal requirements.

Suppliers are responsible for securing the REACH authorization for continued use of any material or mixture containing substances listed in regulation (EC) No 1907/2006, Annex XIV and to ensure that brandgroup's use is included in the authorization.

4.5 Additional Restrictions

4.5.1 Generell

In addition to the requirements for substances according to chapter

- 4.2 GADSL Substance classification
- 4.3 End-of-life vehicle directive
- 4.4 REACH regulation

the following requirements apply.

Printed version is not subject to change service.

Control of prohibited and regulated substances

Identification: I_P3210_S_BG_-_003_EN
Index: C

Status:

Effective

Classification:

Public

Page:

6/12

4.5.2 Radioactive substances

The overall gamma-activity shall not exceed the limit value of 0.1 Bq/g (becquerel per gram) in supplies to the brandgroup.

Any surface contamination on items and packagings shall be kept as low as reasonably achievable and shall not exceed the limit value of 4 Bq/cm² for beta and gamma emitters.

For the measurements, it is permitted to take an average over an area of 300 cm². Non-fixed and fixed contamination needs not be distinguished.

Additionally, the gamma local dose rate at the surface of packagings, containers, and equipment may exceed the natural background radiation by a maximum value of 0.1 µSv/h (microsievert per hour).

4.5.3 Biocidal substances

Biocidal substances that are prohibited for certain product types according to the Biocides Directive (see Regulation (EU) No. 528/2012) are prohibited for deliveries to brandgroup.

In addition, deliveries to EU or EEA markets must comply with BPR regulations for the release of active substances, the authorization of biocidal products and the placing on the market of treated products.

Bans on biocidal substances and approval conditions are provided by the GADSL for the following product types:

- Product type 7: Film preservative
- Product type 8: Wood preservatives
- Product type 9: Protective agents for fibers, leather, rubber and polymerized materials

These requirements only apply to intended use as a biocide.

Printed version is not subject to change service.

Control of prohibited and regulated substances

Identification: I_P3210_S_BG_-_003_EN
Index: C

Status:

Effective

Classification:

Public

Page:

7/12

4.5.4 Ozone-depending substances (ODS)

Ozone-depleting substances (ODS) according to

- Regulation (EC) No. 1005/2009,
- Montreal Protocol
- or EPA Class 1 ODS

are prohibited are prohibited for all deliveries to the brandgroup.

ODS are listed in the GADSL under “ozone-depleting halogenated hydrocarbons and carbons, all components”.

4.5.5 Persistent organic pollutants (POP)

Persistent organic pollutants (POP), which are prohibited according to Regulation (EC) No. 850/2004, are prohibited for all deliveries to brandgroup. The use of POPs in supplier products should generally be avoided by the supplier.

4.5.6 Restriction of hazardous substances in electrical and electronic devices (RoHS)

The corresponding substance restrictions apply to all electrical and electronic devices that fall under Directive 2011/65/EU (RoHS 2) or SJ/T 11363-2006 (China RoHS).

4.5.7 International Honkong-Convention

For marine applications, the “International Hong Kong Convention for the Safe and Environmentally Sound Recycling of Ships, 2009” and in particular the substance bans in Regulation (EU) No. 1257/2013, Annex I and Annex II apply.

4.5.8 Substances classified as carcinogenic, mutagenic or toxic for reproduction (CMR), Sunstances with endocrine properties

In principle, all substances that are considered carcinogenic, mutagenic or reproductively harmful are classified as hazardous (CMR) must be avoided in all deliveries to the brandgroup.

For the medical sector, substances that contain a concentration of 0.1% by mass or more of CMR substances and/or substances with endocrine-disrupting properties are prohibited (EU Regulation 2017/745 Annex I Chapter II).

Endocrine-disrupting substances are those that influence the hormonal system or hormone secretion.

Printed version is not subject to change service.

Control of prohibited and regulated substances

Identification: I_P3210_S_BG_-_003_EN
Index: C

Status:**Effective****Classification:**

Public

Page:

8/12

4.5.9 Per- und polyfluorinated alkyl compounds (PFAS)

Because PFAS or their degradation products are very persistent in the environment, they are also called forever chemicals. Some PFAS are suspected of being carcinogenic.

All suppliers should definitely check their production and supply chains for all PFAS and identify possible substitutes in order to avoid a ban.

4.5.10 Mercury (Hg)

The production of mercury-added production as referred to in Article 4(1) and Annex A, Part I of the Minamata Convention and the use of mercury and mercury compounds in manufacturing processes within the meaning of Article 5(2) and Annex B, Part I of the Minamata Convention shall be for all deliveries to the brandgroup are prohibited.

4.6 Additional requirements for packaging materials

4.6.1 Generell

In addition, packaging materials must meet the requirements for packaging materials (Section 4.6.2).

4.6.2 Requirements for packaging materials

In general, environmentally compatible materials suitable and accepted worldwide for recycling are to be used for all one-way packaging.

The brandgroup only permits a few, selected materials due to reasons associated with the logistical expenditure required for sorting and separating to assure material recycling. Table 1 lists all permitted and forbidden one-way packages and one-way consumables.

Composite materials and packaging chips may only be used following component-specific approval.

The use of anti-corrosion paper and corrosion-inhibiting films is subject to TRGS 615. Nitrosamine compounds, secondary amine compounds, heavy metals and nitrite must not be contained.

For release prior to first delivery, an EU safety data sheet stating the ingredients and an independent certificate of conformity are required.

Adhesive tapes and packaging straps as well as adhesive labels and product labels must not restrict the ability to recycle the carrier material.

Printed version is not subject to change service.

Control of prohibited and regulated substances

Identification: I_P3210_S_BG_-_003_EN
Index: C

Status:

Effective

Classification:

Public

Page:

9/12

4.6.3 Tabel 1 – Permitted and non permitted materials

Type	Permitted material	Non Permitted material
Cardboard	Papers and cardboard made of materials nonhazardous for paper production	Papers and cardboard with waterproof coatings, adhesives, or incompatible compounds/mixtures Bitumen paper / cardboard
Korrosionsschutzpapier	VCI papers, which are demonstrably recyclable together with paper/ cardboard. VCI foils, which are demonstrably recyclable together with plastic foils. [VCI: volatile corrosion inhibitor]	Paper with incompatible additives, incompatibly impregnated or soaked paper (e.g. paper made with bitumen, oil, wax)
Plastics (preferably natural-colored)	Molded parts: PE, PP, PS Protective caps: PE Foil/sheeting: PE with max. 5 % printed area (also bubble wrap foil) Foams: PE, PP, PS Strapping bands: PP, PE, Polyester Polystyrene (molded parts) Plastic combinations PE, PP, PS	Other plastic combinations Rubber compound material, Metal and plastic composite foils, Incompatibly impregnated and VCI plastic foils, Metal and plastic composite materials, Packaging materials containing PVC
Metals	Steel, even galvanized or painted, aluminium	Tin-plated metals (e.g. tin plate) Metals containing heavy metal
Wood	Non-impregnated solid wood and plywood, wood fiber	Chip board, coated or painted wood

4.7 Declaration of substances

4.7.1 General

Ingredients that require declaration or are prohibited in the corresponding purchased products must be declared. At least the name of the ingredient, its CAS number and the concentration in the homogeneous material (unless otherwise required) must be stated.

The REACH Regulation (EC) No. 1907/2006 provides for information requirements about substances of particular concern that are listed in the so-called SVHC (Substances of Very High Concern) candidate list.

The brandgroup suppliers are obliged to inform immediately through an updated supplier certificate and, if necessary, an updated IMDS entry as soon as newer information than that already reported to the brandgroup on substances from the SVHC candidate list with concentrations above 0.1% (w/w) in supplied materials present.

If no information is available on the substances in the materials supplied within 45 days of an update of the SVHC candidate list, it is assumed that none of the relevant substances are contained above 0.1% (w/w). With the entry into force of the obligation to declare SVHCs in the SCIP database according to the Waste Framework Directive (Directive 2008/98/EC), this information must be provided in an appropriate manner.

Printed version is not subject to change service.

Control of prohibited and regulated substances

Identification: I_P3210_S_BG_-_003_EN
Index: C

Status:

Effective

Classification:

Public

Page:

10/12

4.7.2 International Material Datensystem (IMDS) - automotive industry

For the declaration of ingredients of brandgroup purchased products and their materials intended for the automotive industry, as well as for polymer products, an entry in IMDS, the international material data system, is mandatory. The IMDS ID number must be provided to the brandgroup for the corresponding product.

The IMDS data must correspond to the current IMDS rules at the time of creation. A declaration in the form of a data sheet in the IMDS does not constitute an exemption from substance bans.

4.7.3 China Automotiv Material Data System (CAMDS)

For the declaration of China material and substance information from brandgroup purchased products and their materials that are for vehicle manufacturers in China, it may also be necessary to report it to the CAMDS system (China Automotive Material Data System).

4.8 Safety data sheet (SDB)

The content of the safety data sheet is defined in accordance with Annex II of the REACH Regulation (EC) No. 1907/2006. Annex II was last amended by Regulation (EU) 2020/878.

The safety data sheet must be sent to brandgroup purchasing upon first delivery without being asked or upon request. Likewise, after legal changes or other changes, an updated safety data sheet must be handed over to the respective brandgroup purchasing department without being asked.

4.9 Product warning label

Product warning labels are primarily used to ensure consumer safety and that a given product was manufactured to meet regulatory and industry standards.

Certain brandgroup products, such as adhesives, friction materials, cleaners (brake cleaners, etc.), hydraulic fluids (brake fluids, etc.), lubricants (greases, etc.), oils, etc., may require product warning labels on the product or packaging, in addition to provision of safety data sheets, to inform users of chemical hazards or potential exposure to chemical substances contained in the product.

Printed version is not subject to change service.

Control of prohibited and regulated substances

Identification: I_P3210_S_BG_-_003_EN
Index: C

Status:

Effective

Classification:

Public

Page:

11/12

For product labelling the following labeling requirements may apply or need to be followed for example:

- Electronics or electrical products
 - EU RoHS
 - China RoHS
- Mixtures / chemicals:
 - Globally Harmonized System of Classification and Labelling of Chemicals (GHS) of the United Nations
 - CLP regulation in the EU
 - Hazard Communication Standard (HCS) from the OSHA in the United States, etc.
- California Safe Drinking Water and Toxic Enforcement Act (also known as "Proposition 65")

5 Conflict Minerals

In addition to the appropriate handling of hazardous substances, the responsible procurement of raw materials such as tin, tungsten, tantalum and gold is also an important concern of the brandgroup, as their extraction contributes to the financing of military conflicts and human rights violations in some countries.

In 2010, the United States Congress passed a law (Dodd-Frank Wall Street Reform and Consumer Protection Act, Section 1502) that requires listed US companies to disclose the use and origin of four so-called conflict minerals - tin (conflict minerals) demands. This refers to the four raw materials tantalum, tungsten, tin and gold that are mined in the Democratic Republic of Congo or the nine neighboring countries and may be used to finance violent conflicts.

As brandgroup, we expect our suppliers to comply with their due diligence obligations along the supply chain and to provide appropriate reports, documents or written assurances upon request as set out in the "Conflict Minerals Policy".

The "Conflict Minerals Policy" is available in the download area of the brandgroup homepage in the currently valid version:

<https://brand-group.com/download/>

"The following page(s) are not mandatory for use. They do not need to be printed."

Printed version is not subject to change service.

Technical Delivery Condition

Control of prohibited and regulated substances

Identification: I_P3210_S_BG_-_003_EN
Index: C

Status:

Effective

Classification:

Public

Page:

12/12

With my signature, I confirm that I have prepared and reviewed the document truthfully, accurately and to the best of my knowledge and belief within my role (see below) and according to the rules of our quality management. Furthermore, I specifically confirm the criteria mentioned below.

Creator	Release (professional)	Release (disciplinary)
<p>Creation/testing criteria:</p> <ul style="list-style-type: none"> • Completeness and correctness of the information • Formally correct 	<p>Test criteria:</p> <ul style="list-style-type: none"> • Completeness and correctness of the information • Plausibility • Detailed test criteria fulfilled, note appendix if applicable 	<p>Test criteria:</p> <ul style="list-style-type: none"> • Goal of the document achieved • Preparation and review complete • Detailed test criteria fulfilled, note appendix if applicable • Document is applicable for all intended areas
Surname, First name	Surname, First name	Surname, First name
Teutenberg, Patrick	Teutenberg, Patrick	Teutenberg, Patrick
Function/ Role	Function/ Role	Function/ Role
Head of IMS	Head of IMS	Head of IMS
Date	Date	Date
17.12.2023	17.12.2023	17.12.2023
Signature	Signature	Signature
Gez. Teutenberg	Gez. Teutenberg	Gez. Teutenberg

Index	Explanations
C	Document rewritten in terms of content and title, new layout

Printed version is not subject to change service.