

<b>Company Guideline</b>		
<b>R17_0_Substances which are prohibited or subject to declaration in compliance with environmental and ethical requirements</b>		
Index of changes: <b>05</b>		Page 1 of 9

	Created	Approved
<b>by:</b>	Frank Jünemann (Environmental Officer)	Karsten Klein
<b>on:</b>	22.03.2018	23.03.2018

## Contents

<b>0</b>	<b>Index of changes.....</b>	<b>2</b>
<b>1</b>	<b>Purpose .....</b>	<b>2</b>
<b>2</b>	<b>Terms and abbreviations.....</b>	<b>3</b>
<b>3</b>	<b>Process definitions.....</b>	<b>4</b>
	Scope of application.....	4
	Process owner .....	4
<b>4</b>	<b>Requirements relating to the environmentally sustainable design of products and materials .....</b>	<b>4</b>
4.1	List of substances which are prohibited or subject to declaration .....	4
4.2	Packaging requirements .....	4
4.3	Use of halogen in products – voluntary renunciation.....	5
4.4	Requirements on articles and products which are used in relation to drinking water.....	6
4.4.1	KTW guideline (minimum requirements) .....	6
4.4.2	Metal materials in contact with drinking water (minimum requirements).....	6
<b>5</b>	<b>Radioactive contamination .....</b>	<b>7</b>
<b>6</b>	<b>Ethical requirements .....</b>	<b>7</b>
6.1	Conflict minerals.....	7
6.2	Code of conduct .....	7
<b>7</b>	<b>Certification procedure relating to Directive 2011/65/EU on restricting the use of specific hazardous substances in electronic devices (known as RoHS2) .....</b>	<b>8</b>
7.1	Exceptions to RoHS.....	8
7.2	Certification at the product level.....	8
<b>8</b>	<b>Appendix I .....</b>	<b>9</b>

## Company Guideline

### R17\_Substances which are prohibited or subject to declaration in compliance with environmental and ethical requirements

Index of changes: **05**

Page 2 of 9

#### 0 Index of changes

Index of changes	Date of change	Description of change
00	14.01.2014	Initial version
01	16.10.2014	Conflict minerals, code of conduct for suppliers, update of the REACH SVHC list
02	12.08.2015	Update of the appendix: QUNDIS list of prohibited substances
03	07.01.2016	Modification of new RoHS substance prohibitions Integration of the BOM checklist and R17_1 in one document Stricter requirements with regard to conflict minerals Amendment to directive name
04	19.05.2017	Update with additional Customer requirements
05	22.03.2018	Add section 5 - Radioactive contamination

#### 1 Purpose

The purpose of this directive is to ensure that in development, production, use, recycling and disposal, materials and finished products are dealt with in a way which meets ethical, environmental and safety-in-the-workplace requirements.

This document contains the currently applicable QUNDIS list (BOM checklist) of all prohibited and regulated substances. The supplier continues to be responsible for procurement and compliance with the applicable laws, norms and directives. Accordingly the obligation of the supplier to comply with statutory regulations (e.g. national laws) is not affected by this norm. Where there is a difference between the QUNDIS specifications and other requirements in terms of the law, norms, customer specifications or other stipulations, the stricter requirement should always be applied.

QUNDIS requires that all products or product components, packaging and transport materials which are supplied to QUNDIS should fulfil the requirements of the QUNDIS list of prohibited substances.

**Raw materials of unknown origin and/or composition, or raw materials for which there is no data must not be used. This directive is part of the QUNDIS Terms of Purchase (TEB). All suppliers undertake to comply with this directive.**

In individual cases and on request QUNDIS must - for the purpose of initial sampling – be provided with the applicable technical data sheets relating to all raw materials and supplementary materials. QUNDIS reserves the right to implement examinations and laboratory analyses in individual cases. In the event of negative test findings, the resulting costs will be charged to the supplier.

## Company Guideline

### R17\_Substances which are prohibited or subject to declaration in compliance with environmental and ethical requirements

Index of changes: **05**

Page **3** of **9**

This guideline serves to ensure the implementation of legal requirements and the demands of QUNDIS customers. Compliance with the guideline is the responsibility of the supplier. If the supplier identifies any divergence from the above-mentioned specifications, he must inform QUNDIS without delay. QUNDIS will decide on the further procedure.

Ethical considerations are an essential part of our purchasing policy: for this reason QUNDIS has defined a code of conduct which imposes clear fundamental principles and requirements on suppliers of goods and services with regard to their responsibility for people and the environment.

## 2 Terms and abbreviations

**Homogeneous material:** This is material which can't be broken down mechanically into other materials. The term 'homogeneous' means 'with the same features throughout'. Examples of homogeneous materials are individual types of plastic, ceramics, glass, metal, alloys, synthetic resins and coatings.

**Intentionally added:** Any concentration of  $\geq 0.001$  % in a homogeneous production material is classed as having been intentionally added.

**Prohibited substances:** In manufactured products, components, production materials, substances, preparations, auxiliary and operating materials must not be contained in quantities above the threshold levels indicated in this document. Such substances may only be contained as naturally occurring contaminants, and must not be added intentionally. Any contamination with the substances must be indicated in terms of quality.

**Substances which are subject to declaration:** In a number of applications, substances which are subject to declaration are not desired and must be declared if the level is above the indicated threshold value. The listed substances must be indicated for every manufactured product, component, production material, preparation, auxiliary or operating material. The document contains threshold values for the individual substances. Below the threshold levels no declaration is required.

## Company Guideline

### R17\_Substances which are prohibited or subject to declaration in compliance with environmental and ethical requirements

Index of changes: 05

Page 4 of 9

### 3 Process definitions

#### Scope of application

These guidelines apply to QUNDIS GmbH and its suppliers.

#### Process owner

Environmental management

### 4 Requirements relating to the environmentally sustainable design of products and materials

#### 4.1 List of substances which are prohibited or subject to declaration

**The BOM list of restricted and declarable substances must be used as the list of substances which are prohibited or subject to declaration.**

The current [BOM list of restricted and declarable substances](#) is available on the Internet at:

<https://www.bomcheck.net/suppliers/restricted-and-declarable-substances-list>

*Remarks: In response to the publication of the REACH list of candidates, the BOM list of restricted and declarable substances is updated twice a year. No login is required.*

The Negative List bans or restricts the use of chemical substances in our products and production processes.

Please remember to inform us if the components delivered to QUNDIS contain any of the substances listed. The substances marked "Declarable" (mostly candidate list substances) in the BOMcheck Negative List are not yet prohibited, but as a supplier you have a legal obligation to inform us, if the concentration in one of the components in a maybe complex product is above 0.1% w/w.

#### 4.2 Packaging requirements

Please note the restrictions on packaging substances and packaging waste contained in the [BOM list of restricted and declarable substances](#) (2. Packaging restrictions).

## Company Guideline

### R17\_Substances which are prohibited or subject to declaration in compliance with environmental and ethical requirements

Index of changes: **05**

Page 5 of 9

#### 4.3 Use of halogen in products – voluntary renunciation

QUNDIS takes into account possible impacts on people and the environment at the earliest possible stage, and takes specific measures in order to avoid risks to people and the environment.

Wherever possible QUNDIS offers customers halogen-free products.

Halogens are used principally as flame retardants in plastics. In the event of fire, in particular, bromine and chlorine can form corrosive, poisonous compounds. For this reason, wherever possible QUNDIS uses plastics which offer comparable protection without flame retardants containing halogen.

Since July 2006 the EU's RoHS directive has restricted the use of hazardous substances in electro-technical and electronic devices. It forbids the use of heavy metals, polybrominated biphenyls (PBBs) and polybrominated diphenyl ethers (PBDEs).

Since the WEEE directive came into effect (2012/19/EU) any products (e.g. PVC for cable sleeves, circuit boards, plastic housings...) which contain halogen-based flame retardants must have special markings, so that they can be collected and disposed of separately.

QUNDIS pursues the target of using only halogen-free products.

The International Electro-technical Commission (IEC) defines freedom from halogen on the basis of the quantities of chlorine and bromine contained (Standard IEC 61249-2-21). A product is classified as halogen-free if the following threshold values are complied with:

**<900 ppm chlorine**

**<900 ppm bromine**

**<1500 ppm total quantity of chlorine and bromine**

In addition, products which contain **<500 ppm** antimony trioxide are halogen-free.

**If it is not possible for technical reasons (ensuring the required fire protection level) to do without halogens, QUNDIS must be informed about this. A declaration must be provided for the relevant articles.**

## Company Guideline

### R17\_Substances which are prohibited or subject to declaration in compliance with environmental and ethical requirements

Index of changes: **05**

Page 6 of 9

#### 4.4 Requirements on articles and products which are used in relation to drinking water

All raw materials, substances, articles or products which are used in relation to drinking water must comply with the latest specifications of Germany's drinking water regulations. Particularly relevant in this respect is §17 "Requirements relating to facilities for obtaining, treating or distributing drinking water". These drinking water regulations implement the EU directive on drinking water quality for human consumption (Directive 98/83/EG) in national law (Germany).

**Please note: The individual national legislation on drinking water hygiene within the individual country also applies!**

Further applicable documents:

EU directive

[Council directive 98/83/EC dated 3 November 1998 on the quality of water for human consumption](#)

Implementation in Germany

[Directive on the quality of water for human consumption \(drinking water directive: TrinkwV 2001\)](#)

##### 4.4.1 KTW guideline (minimum requirements)

In the case of plastics the KTW guidelines regulate the hygienic evaluation of organic materials in contact with drinking water:

<http://www.umweltbundesamt.de/sites/default/files/medien/419/dokumente/ktwleitlinie.pdf>

Certification documents for plastics:

- KTW certificate
- W270 certification

Documents which also apply:

[EU directive No. 10/2011 of the commission dated 14 January 2011 on materials and articles made of plastic which are intended to come into contact with foodstuffs](#)

##### 4.4.2 Metal materials in contact with drinking water (minimum requirements)

Metal materials are subject to the assessment specifications for metal materials in contact with drinking water (basis for evaluating metal):

[http://www.umweltbundesamt.de/sites/default/files/medien/376/dokumente/bewertungsgrundlage\\_fuer\\_metallene\\_werkstoffe\\_im\\_kontakt\\_mit\\_trinkwasser.pdf](http://www.umweltbundesamt.de/sites/default/files/medien/376/dokumente/bewertungsgrundlage_fuer_metallene_werkstoffe_im_kontakt_mit_trinkwasser.pdf)

## Company Guideline

### R17\_Substances which are prohibited or subject to declaration in compliance with environmental and ethical requirements

Index of changes: **05**

Page **7** of **9**

## 5 Radioactive contamination

Supplier guarantees that the delivered Products do not contain any radioactive contamination exceeding one tenth of the exemption values as defined by the Basic Safety Standards of the International Atomic Energy Agency (IAEA) in its current version.

We reserve the right to carry out measurements and incoming goods tests.

## 6 Ethical requirements

### 6.1 Conflict minerals

As a company which processes various metals QUNDIS is under an obligation to protect the health and safety of both people and the environment.

These principles are an integral part of our business operations. We expect from our suppliers that – as partners in our sustainability strategy – they share this commitment with us. Armed conflict is financed by the production of raw materials in ways which are socially irresponsible and damaging to the environment. The Dodd Frank Act passed in the USA defines tin, tungsten, tantalum and gold, together with any products made from them, as 'conflict minerals'.

QUNDIS requires confirmation from its suppliers that all products and materials supplied to QUNDIS are free from conflict minerals.

If **tin, tungsten, tantalum** or **gold** is contained in products or materials supplied to QUNDIS, their origin must be certified by the provision of details of the smelter (for this purpose the conflict-free-reporting form should be filled out and sent to the QUNDIS purchasing department):

<http://www.conflictreesourcing.org/conflict-minerals-reporting-template/>

### 6.2 Code of conduct

For QUNDIS, maintaining sustainable business relations with all suppliers is a matter of priority. For this reason we have specified minimum standards in a code of conduct:

[http://www.qundis.com/wp-content/uploads/2015/05/Code\\_of\\_Conduct\\_for\\_Suppliers\\_to\\_QUNDIS\\_Group.pdf](http://www.qundis.com/wp-content/uploads/2015/05/Code_of_Conduct_for_Suppliers_to_QUNDIS_Group.pdf)

## Company Guideline

### R17\_Substances which are prohibited or subject to declaration in compliance with environmental and ethical requirements

Index of changes: **05**

Page 8 of 9

## 7 Certification procedure relating to Directive 2011/65/EU on restricting the use of specific hazardous substances in electronic devices (known as RoHS2)

Products may not be placed on the market without certified RoHS compliance.

### 7.1 Exceptions to RoHS

**Annex III of RoHS (Directive 2011/65/EU)** lists the applications which are exceptions to Art. 4 Section 1. If such an exception applies, **the supplier must report the details to QUNDIS, together with the expiry date.**

### 7.2 Certification at the product level

The certification must be directly related to the individual article. The supplier can submit a declaration that the relevant products meet the R17 guideline. For this purpose the individual articles must be listed. The formulation contained in Appendix I can be used.



<b>Company Guideline</b>		
<b>R17_Substances which are prohibited or subject to declaration in compliance with environmental and ethical requirements</b>		
Index of changes: <b>05</b>		Page 9 of 9

## 8 Appendix I

Declaration of compliance with the QUNDIS guideline on substances which are subject to prohibition and declaration in conformity with environmental and ethical requirements

We,

Company: .....

Supplier number: .....

Address: .....

.....

hereby declare our compliance with the QUNDIS GmbH R17 guideline. In the event of changes in the applicable specifications we undertake to make the necessary checks without delay and to inform QUNDIS accordingly.

We wish to declare the following substances (please indicate the precise designation and CAS number):

- None
- 

.....  
Place, date

.....  
legally binding signature, company stamp

Appendix:

**All articles supplied to QUNDIS must be listed in full as an appendix to this confirmation.**

Reply to:  
Qundis GmbH  
Sonnentor 2  
99098 Erfurt

Fax: +49 361 26 280-120  
E-mail: [responsible\\_employee@qundis.com](mailto:responsible_employee@qundis.com)