

Amphenol Amphenol ConneXus OÜ	Quality instructions Amphenol Connexus guidance on restricted materials in products	Code: QPI 10.3-1-2-2I
		Date.: 14.08.2019
Checked by : Marija Jefremova	Approved by: Toni Tuppurainen	Page/Pages: 1/5

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1. Introduction

Legislation in various countries is limiting the use of potentially dangerous substances. Potentially dangerous substances are chemicals and materials that may at some point of their life cycle – during manufacturing, use, or recycling – cause harm to human health, human rights or the environment. In order to comply with the legislation, Amphenol Connexus has to eliminate certain prohibited substances in its products, and provide to its customers information on potentially dangerous substances found in the products. This information can only be collected with the help of our suppliers.

Amphenol Connexus requires in its General Terms and Conditions of Purchase that its suppliers refrain from the use of child or forced labor, and comply with national and international legislation and sustainability requirements. Connexus 'es suppliers are required to demand the same behavior from their suppliers, and ensure that no business practices are in conflict with requirements issued by Amphenol Connexus.

Provision of the information and elimination of certain substances may also be a direct regulatory requirement for Connexus's suppliers depending on the type of product manufactured, country where the product is delivered to, and supplier's country of operation.

2. What is expected from Amphenol Connexus

Amphenol Connexus is subject to three kinds of limitations regarding substances present in the products: prohibition of certain substances, requirement to provide information on certain substances found in products, and elimination of some materials exposed to serious human rights violations.

These requirements arise mainly through the following regulations, and apply to selected Amphenol Connexus products dependent of their function, construction and market area:

- EU Regulation No 1907/2006: Registration, Evaluation, Authorization and Restriction of Chemicals (**REACH**)
- EU Directive 2015/863: Annex II EU Directive No 65/2011 (**RoHS 3**).
- Safe Drinking Water and Toxic Enforcement Act of 1986 (**California proposition 65 – special request if needed**)
- The Dodd–Frank Wall Street Reform and Consumer Protection Act (**Dodd-Frank conflict minerals act**)

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2.1 Requirements arising through EU regulations

The current requirements regarding disclosure of information and prohibition of substances arise mainly through European legislation. According to REACH and RoHS, companies selling products in the EU, including Amphenol Connexus, have to:

- **Register substances that are intended to be released from articles** (Amphenol Connexus s products or components included in products) in quantities of over one ton per year
- **Notify European Chemicals Agency of substances of very high concern (SVHC) in articles**, if their amount exceeds one ton per year and if the concentration exceeds 0,1% weight by weight
- **Inform customer of substances of very high concern (SVHC) and other dangerous substances in articles** to allow the safe use and disposal of articles, if the concentration of such substances exceeds 0,1% weight by weight
- **Get an authorization for the use of certain substances** in applications specified by REACH
- **Not to use certain substances** in applications specified by REACH, RoHS or other related legislation

To identify legal requirements affecting your company, please refer to the following sources:

- REACH: ECHA's Navigator
- RoHS: EC's FAQ guidance documents

2.2 Requirements arising through US regulations

The US regulation adds some reporting requirements not covered by the European regulation. According to California proposition 65, companies must inform customers in case the exposure of certain substances exceeds the given thresholds. These substances are – apart from a few exceptions – covered also by REACH. Dodd-Frank conflict minerals act requires companies to determine if the tin, tantalum, tungsten or gold found in their products originates from the Democratic Republic of Congo or the adjoining countries, and directly or indirectly finances armed groups in the region. Products can be reported as “conflict free”, if they

- do not contain tin, tantalum, tungsten or gold
- any of the tin, tantalum tungsten or gold does not originate from DRC or the adjoining countries
- it can be determined that the materials originating from DRC or the adjoining countries do not finance armed groups

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3. What does Connexus expect from its suppliers

3.1 Information on potentially dangerous substances

Connexus must provide sufficient information to its customers to ensure safe use, maintenance and disposal of products. This includes information regarding materials used in the products. In order to comply with the regulatory reporting requirements, Connexus must as a minimum obtain the following information from its suppliers:

- **Certification of RoHS compliance or information of non-compliance of electrical and electronic equipment** (later on referred to as EEE)
- **Information regarding any SVHC substances found in the products supplied to Connexus**, in case their concentration exceeds the threshold set by related legislation
- Name, CAS and EC code of the substance, and its concentration in the product (if exceeding the threshold)
- Location of the substance in the product
- Instructions for safe handling, maintenance and disposal of the product in case specific safety precaution is needed due to the substance
- Information if the substance is intended to be released from the product during its normal use¹
- **The information must be provided at a component level²**: In case the concentration of SVHC or other dangerous substances exceeds the given threshold in any individual component included in the product delivered to Connexus, the above information must be made available.

¹ See the definition of "normal use" in ECHA's guidance documents

² Connexus follows the "once an article – always an article" interpretation of REACH. For further details on how to follow this interpretation, please refer to the guidance documents by German or Swedish authorities

3.2. Controlling of raw material supply chain

Connexus expects that its suppliers implement a supply chain due diligence process that ensures no materials originate from the DRC or adjoining countries and finance armed groups in the region.

The legal requirement is found in Section 1502 of the "Dodd-Frank Wall Street Reform and Consumer Protection Act" which identifies certain "Conflict Minerals" as financing armed conflict in the Democratic Republic of the Congo and the surrounding region. To comply, Connexus must obtain accurate information from suppliers about whether components in our products contain tin, tantalum, tungsten or gold. If any of those substances are present, Connexus must trace them to their source.

Actions required of your company in order to meet Connexus`es requirements:

- 1. Download the latest Conflict Minerals Reporting Template (CMRT)** from <http://www.responsiblemineralsinitiative.org/>
- 2. Complete the Conflict Minerals Section**
- 3. Submit your information** to e-mail: 'quality@amphenol.ee'

Connexus is committed to respecting human rights and relevant legislation in all its operations, including sourcing of products and components. Connexus must not deal with companies who are known to violate Connexus's Code of Conduct.

Similarly, our suppliers are not allowed to deal with suppliers that violate the aforementioned requirements.

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4. Best practices

4.1 How to identify restricted substances

There are different ways for identifying substances in products. Some of the methods are best suited for products manufactured in-house, while others are suited for sub-contracted products. Generally, information can be obtained through:

- Chemical analyses of products
- Material safety datasheets (MSDSs)
- Manufacturers' material declarations provided by e-mail
- Manufacturers' material declarations provided through IMDS (for automotive suppliers only)
- Probability assessments etc.

Chemical analyses are an accurate but expensive method. Their drawback is also that a single analysis does not reveal all substances, and therefore numerous analyses, or preliminary ruling out of individual substances may be required. Further information on the planning and execution of chemical analyses is available in ECHA's guidance documents. ⁴

Material safety datasheets are an applicable data source for products manufactured through a chemical process. Their application is therefore limited to own manufacturing of certain types of products, and use of chemicals or paints.

Manufacturer's material declarations are an effective way of collecting information from the supply chain. Numerous manufacturers of high volume products have material declarations publicly available for their products. Many others can provide the declarations upon request as it is a mandatory requirement in numerous market areas. It is also recommended to utilize appropriate contractual stipulations to ensure data is available from suppliers, as a minimum on request. **IMDS** (International Material Data System) - is the automobile industry's material data system, a global standard used by almost all the global **OEMs**). It enables to comply to worldwide ELV directives, REACH SVHC, RRR and similar regulations.

Probability assessments are not a method as such for identifying restricted substances. Instead, they are a method for identifying the products with the highest probability of containing restricted substances. These products can then be subjected to the above mentioned methods