

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, Valmet 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 Valmet's suppliers.

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

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

This document provides instruction to Valmet on how to comply with regulatory requirements regarding prohibition and reporting of materials found in products. In case this instruction conflicts with any regulation or standards, the strictest requirement must be applied.

2 What is expected from Valmet

Valmet 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 Valmet products dependent of their function, construction and market area:

- EU Regulation No 1907/2006: Registration, Evaluation, Authorization and Restriction of Chemicals (**REACH**)
- EU Directive No 863/2015: Restriction of the use of certain hazardous substances in electrical and electronic equipment (**RoHS 3**)
- Safe Drinking Water and Toxic Enforcement Act of 1986 (**California proposition 65**)
- The Dodd–Frank Wall Street Reform and Consumer Protection Act (**Dodd-Frank conflict minerals act**)
- China MIIT Order No 32 (**China RoHS2**)

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 Valmet, have to:

- **Register substances that are intended to be released from articles** (Valmet'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

These requirements and possible other requirements may apply also to Valmet's suppliers. 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

2.3 Requirements arising through regulations in other countries

Legislation similar to EU REACH and RoHS has been applied in numerous countries, including but not limited to China, The Republic of Korea, Vietnam, Serbia and Ukraine. The requirements arising through these regulations are similar to those set by the EU regulations, but some details differ from one another. Therefore, compliance with one of the regulations does not necessarily ensure compliance with all.

For example, China RoHS 2, officially MIIT Order 32 on Administrative Measures for the Restriction of the Use of Hazardous Substances in Electrical and Electronic Products, sets some additional compliance requirements for electronic and electrical products. An environmental use

period must be defined for all products containing any of the regulated hazardous substances. They must also be accompanied by an inventory of hazardous substances. It should be noted that while the regulated materials are the same as in EU RoHS 2, there are no exempted uses of hazardous substances in China RoHS 2. Therefore, also products meeting the requirements of EU RoHS 2 may require the additional documentation under China RoHS 2.

3 What does Valmet expect from its suppliers

3.1 Prohibition of certain substances

Valmet is prohibited from selling products that contain certain materials in a number of market areas. As Valmet is selling its products globally, all restrictions shall be applied across all market areas and product categories.

Valmet requires from its suppliers that they do not sell to Valmet any products containing prohibited substances over given substance specific threshold. Most up to date regulation shall be referred to in order to identify any prohibited materials found in the products designed or purchased by Valmet. Valmet has prepared an indicative summary of restricted materials, which can be shared with Valmet suppliers on request.

Valmet must be informed without delay in case any prohibited materials are found in products sold to Valmet.

3.2 Information on potentially dangerous substances

Valmet 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, Valmet 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 or other potentially dangerous substances specified by Valmet found in the products supplied to Valmet**, in case their concentration exceeds the threshold set by Valmet or related legislation
- **Information regarding substances regulated under China MIIT Order No 32 found in any products supplied to Valmet**, also in case the products are not in the scope of China MIIT Order No 32

Information regarding potentially dangerous substances in products must contain, as a minimum:

- 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 Valmet, the above information must be made available.

3.3 Controlling of raw material supply chain

Valmet is committed to respecting human rights and relevant legislation in all its operations, including sourcing of products and components. Valmet must not deal with companies who are known to violate Valmet's Code of Conduct or Valmet's Sustainable supply chain policy. Similarly, Valmet's suppliers are not allowed to deal with suppliers that violate the aforementioned requirements.

Valmet 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.

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
- 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.

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

¹ See the definition of "normal use" in [ECHA's guidance documents](#)

² Valmet 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

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.

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. Valmet has carried out a probability assessment for a number of products purchased by the company. The results shown in tables 1 and 2 can be used by Valmet's suppliers to identify their products possibly containing restricted substances.

Table 1. Grouping of different product categories according to their exposure to restricted materials

High risk product categories:	Electrical devices, plastic and rubber parts, chemicals, paints
Medium risk product categories:	Electronic components
Low risk product categories:	Metal parts, ceramics, textiles, mechanical components, packaging

Table 2. Breakdown of high and medium risk product categories (excl. chemicals and paints)

Product category	Electrical devices	Plastic and rubber parts	Electronic components
Products with highest exposure to restricted substances	<ul style="list-style-type: none"> - Devices containing flame protected plastic parts - Devices containing PVC parts (in e.g. cable insulations) - Devices with lacquer coating or devices containing lacquer coated parts - Cables, especially PVC cables - Transformers 	<ul style="list-style-type: none"> - PVC containing parts - Cable insulations, especially PVC - Sealants - EPS, XPS and PS insulations 	<ul style="list-style-type: none"> - Capacitors - Batteries - Integrated circuits

To ensure cost efficiency in obtaining the necessary information, **the following approach should be utilized on collecting information on potentially dangerous substances in products and components:**

1. Identification of products with high probability of containing restricted substances
2. For high probability products: continuous monitoring of manufacturer's material declarations and/or MSDSs to identify restricted substances
For medium and low probability products: regular monitoring of manufacturer's material declarations and/or MSDSs to identify restricted substances
3. For high probability products, regarding which no material declarations are available: cross checking against similar products. In case similar products are found to contain restricted substances, the studied product should also be considered to contain the same substances

4. For high probability products, regarding which no information on similar products is available: chemical analyses focusing on the relevant substances

For chemicals and intermediates, the information can best be obtained from material safety data sheets provided by suppliers. Chemicals or intermediates for which MSDS is not available are not allowed to be used.

The continuous monitoring of manufacturers' material declarations should be supported by contractual stipulations. The data management should also include regular quality checks, which can be carried out by e.g. comparing the information provided by suppliers to information publicly available regarding the same or similar products.

4.2 Controlling material supply chain

Ensuring that materials used in the products do not contribute to human rights violations in the DRC or adjoining countries is a multi-step process. The first step is to identify which products or components contain relevant materials. This can be done for example by using the excel file provided together with this guidance document.

In case components that are likely to contain any of the four materials are identified, their manufacturers should be contacted to determine if they have a sufficient due diligence process in place. The most recent version of Conflict Minerals Reporting Template from Conflict Free Smelter Initiative (CFSI CMRT) should be utilized for collecting information from suppliers. If any of the four materials are purchased directly, their origin can be determined with the help of e.g. Conflict Free Smelter Initiative.

5 Communicating the information to Valmet

Valmet hazardous substances questionnaire is the primary channel used by Valmet for collecting information on restricted materials. The questionnaire is sent to selected suppliers based on e.g. the type of products purchased by Valmet. The questionnaire is always in English, as presented in appendix 2 of this document. A breakdown of the questions is presented below.

Question 1:

Do all products supplied by You to Valmet comply with the requirements of European Directive 2015/863/EU, referred to as RoHS III, and with the China MIIT Order No 32, referred to as China RoHS II?

- Yes
- No, provide further information in appendix
- Not relevant: none of the products sold to Valmet are in scope of RoHS III

RoHS 3 applies to electrical and electronic equipment (EEE). All EEE sold to Valmet shall be RoHS compliant unless otherwise requested by Valmet. In case all relevant equipment and materials comply with the substance restrictions and other applicable requirements or RoHS III, question should be answered as "Yes".

In case any product sold to Valmet does not comply with RoHS, the question should be answered as “No”. In such case, an appendix containing relevant additional information must be provided. The additional information should provide e.g. list of non-compliant products and explanation to why they do not meet the requirements.

The question shall be answered “Not relevant” in case none of the products sold to Valmet are in the scope of RoHS, e.g. they are services or products used exclusively in applications outside the scope of RoHS.

Question 2:

Does any of the products supplied by You to Valmet contain lead, mercury, cadmium, hexavalent chromium, PBB, PBDE, any Substances of Very High Concern (SVHC) as defined under the EU Regulation 1907/2006 (REACH), or any other substance required to be reported by relevant national authorities or Valmet?

- No
- Yes, provide further information including list of affected products and identity of substances in appendix

In case the question is answered as “yes”, appendix containing the relevant additional information must be provided. The additional information shall contain as a minimum the list of products contain substances of very high concern, and the identity of substances contained in those products.

In case no relevant substances are found in the products above relevant substance specific thresholds, the question shall be answered as “No”.

Question 3:

Do all products supplied by You to Valmet comply with the substance restrictions of EU Regulation 1907/2006 (REACH), or any other relevant substance restrictions set by national authorities or Valmet?

- Yes
- No, provide further information in appendix

In case the question is answered as “no”, appendix containing the relevant additional information must be provided. The additional information should provide e.g. list of non-compliant products and explanation to why they do not meet the requirements.

In addition to questions 1-3, also data and contact information must be provided. The validity of the answer will be evaluated based on date, and contact information will be utilized for requesting of additional information if needed.