

International Material Data System (IMDS)

Material Data for Assemblies - Cooperation between ZVEI and the Automotive Industry on the declaration of material data

The Electronic Components and Systems Division and PCB and Electronic Systems Division within the ZVEI - German Electrical and Electronic Manufacturers' Association have developed an efficient concept for the material data declaration of electronic components and printed circuit boards (PCB). The material data can be captured by forming cross-company product groups with typical values. These material data sheets, so-called umbrella specifications, greatly simplify the declaration without any noticeable loss of accuracy. This concept has been successfully applied by the automotive industry since 2004.

In several meetings, representatives of the IMDS Steering Committee and ZVEI discussed the possibility of implementing the concept of umbrella specifications also for the IMDS system.

As a result of this dialogue, the IMDS Steering Committee released Recommendation 019 "Electric/Electronic (E/E) components and assemblies" (previously: Printed Circuit Boards [PCB]) describing the method of entering material data of electronic assemblies (populated PCBs). Developed, among others, in cooperation with members of the ZVEI, it was updated in 2010 and 2011 by an industrial working committee. This work will be continued if there are any changes in applicable legislation (e.g. ELV or REACH).

In line with Recommendation 019, material data declaration of assembled PCBs can be harmonized for specific types. These types have a modular design to enable detailed specification of product-specific exemptions according to the End-of-Life Vehicles Directive 2000/53/EC. For this purpose, the IMDS has defined semi components for the general standard composition and for the respective exemptions according to Appendix II. These semi components are based on the input of the manufacturers of electrical and electronic components.

Ideally suppliers should provide a full IMDS declaration. Under special conditions as described in Recommendation 019 the simplified approach is permitted, provided that the necessary material data has been collected by the manufacturers of electrical and electronic components. Different data formats, such as umbrella specifications and IPC 1752 (class 5 or 6) can be used for the material declaration of E/E components subject to the agreement between the respective business partners. Details on the declaration are provided in Recommendation 019.

Car manufacturers represented in the IMDS Steering Committee accept this method of entering material data of an assembly; specification of trade names, product names or individual suppliers is not compulsory.

In this way, the concept of a minimum input (Flat Bill of Materials) was taken into account. Representatives of the ZVEI and the automotive industry alike agreed that the constructive talks had been very positive and will be continued.

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