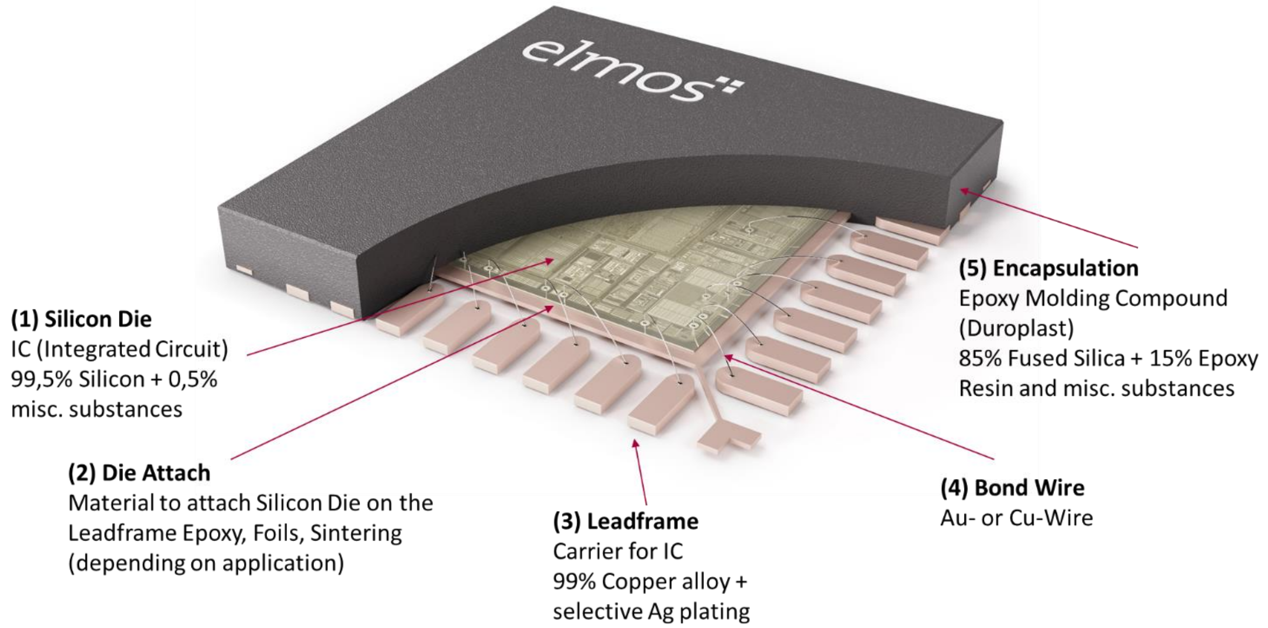
Elmos
ESG Policies

Section:	Environment
Chapter:	Materials
Policy:	Material composition and declaration
Coverage:	Elmos Group
Supported UN SDGs:	
Addressed GRI Standards:	301, 308

The innovative semiconductors manufactured by Elmos are highly complex products. Our silicon-based semiconductor solutions consist of five essential components. The starting point is a silicon wafer. The resulting silicon dies (ICs, integrated circuits) (1) processed on the wafers are attached to a copper-based leadframe (3) using an application-specific die attach (2). Both are then wired with gold or copper (4). The chip is then protected by a duroplast encapsulation (5) made of epoxy, to which approx. 85% fused silica is added as a filler material.



Elmos is committed to compliance with applicable laws regarding material declarations and material restrictions such as RoHS and REACH. A four-stage process has been established for this purpose. First, the ECHA requirements for the declaration of hazardous substances are checked. Then, the materials are checked for the presence of these hazardous substances using their data sheets (TDS and SDS). In addition, material samples for all materials are taken once a year by independent analysis laboratories. We also use the IMDS and CAMDS material databases and request the relevant data directly from the manufacturers.

The use of secondary or recycled materials in the product itself is not readily possible in the semiconductor industry. The qualification processes in the automotive industry make it difficult to change individual materials. There are also virtually no substitution options for the chemicals used in wafer processing, i.e. in the upstream value chain.

Instead, we focus on eco-design. Thanks to their high energy efficiency, our products are already making a significant contribution to reducing greenhouse gases and thus to curbing climate change. Moreover, through innovation we try to consider and reduce the environmental impact of our products as early as the product design stage and therefore during the development process. Elmos is, for example, working on smaller structure sizes which are associated with lower material requirements and therefore a lower environmental impact.

Company profile	Product matrix and product contribution
ESG policies	Critical raw materials and conflict minerals
	Management of hazardous substances
Accompanying documents	Code of Conduct for Suppliers and Business Partners
	Conflict Mineral Policy
	ELV, RoHS, REACH, and “Rare Earths” Statement