



# SAFETY FACTS

## SAFE PRACTICES FOR HANDLING AND DISPOSAL OF ELECTRONIC COMPONENTS CONTAINING COPPER BERYLLIUM

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Copper beryllium (CuBe), in solid form and as contained in finished products, presents no special health risks. Most manufacturing operations, conducted properly on well-maintained equipment, are capable of safely processing copper beryllium-containing materials. However, like many industrial materials, copper beryllium may present a health risk if handled improperly. The inhalation of dust, mist or fume containing beryllium can cause a serious lung condition in some individuals. The degree of hazard varies, depending on the form of the product, how it is processed and handled, as well as the amount of beryllium in the product. Read the product specific Safety Data Sheet (SDS) for additional environmental, health and safety information before working with copper beryllium alloys.

In addition, processing copper beryllium alloys shall be conducted in accordance with the Beryllium Standard for General Industry (29 CFR 1910.1024) established by the Occupational Safety and Health Administration (OSHA) which includes a Permissible Exposure Limits (PEL) of 0.2 microgram beryllium per cubic meter ( $0.2 \mu\text{g}/\text{m}^3$ ) as an 8-hour Time Weighted Average (TWA), a Short-Term Exposure Limit (STEL) of  $2.0 \mu\text{g}/\text{m}^3$  determined over a 15-minute sampling period and ancillary requirements prompted at an Action Level (AL) of  $0.1 \mu\text{g}/\text{m}^3$  or other specified situations.

Because of their high strength, excellent electrical conductivity and resistance to elevated temperatures, copper beryllium alloys are specified in a wide range of high reliability electrical and electronic uses. Applications, including connectors, switches and relays that are used in the automotive, computer and telecommunication industries, account for millions of pounds of annual consumption of copper beryllium alloys.

Most operations associated with the fabrication, handling and use of electronic components containing copper beryllium alloys do not generate small particles and, therefore, present low inhalation concern.

Copper beryllium is sufficiently malleable to resist fragmentation when electronic devices are shredded or crushed. Since copper beryllium is stable under landfill disposal conditions, it is not considered a hazardous waste. It can be disposed of in the same manner as other common metal scrap. Segregated copper beryllium scrap is economically recycled by Materion Brush Inc.



### ADDITIONAL INFORMATION

The information contained in this Safety Facts applies only to the subject referenced in the title. Read the SDS specific to the products in use at your facility for more detailed environmental, health and safety guidance. SDSs can be obtained by contacting the Materion Brush Inc. Product Safety Hotline at (800) 862-4118 or visit our website at [www.materion.com](http://www.materion.com).

Additional information can also be obtained by contacting a Materion Brush Inc. Sales Representative or:

Product Stewardship Department  
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