

Dear Reader,

Welcome to our Easy Guide Blast dedicated to beryllium-containing materials - **SAWING OPERATIONS**.

CONTEXT OF THE BE RESPONSIBLE PROGRAMME



As you may know, the Be Responsible Programme was launched by the Beryllium Industry in an effort to advance the science of beryllium health and safety as well as protect beryllium workers and their close entourage.

The Beryllium Science and Technology Association and its members stress that substantial uncontrolled workplace exposure to beryllium airborne particles can present a potential health and safety risk to employees.

This guide shares information on **Sawing Exposure Control**. This is the third of nine guides on specific processes provided by the Be Responsible Programme.

WHAT TO ACHIEVE

The inhalation of beryllium-containing dust, mist or fume can cause a serious lung condition in some individuals. The use of engineering and work practice controls are the preferred methods of controlling exposure to beryllium-containing particulate reliably below the national occupational exposure limit (OEL) applicable to your Member State for airborne beryllium.

SAWING EXPOSURE

The sawing of beryllium-containing alloys may present a health hazard if effective controls are not implemented.

Sawing (band or tooth blade) is expected to be a low inhalation concern while abrasive sawing is likely an inhalation hazard.

WHAT TO DO

The degree of hazard varies depending on the form of the product and how the material is processed and handled.

- 1 Read the product Specific Safety Data Sheet (SDS).
- 2 Use wet methods. The proper use of cutting fluids is generally an effective method to reduce the generation of airborne particulates of beryllium. Indeed, cutting fluids are used to lubricate and cool the cut and to flush away resulting swarf.

COMPLEMENTARY ACTIONS

- Care should be given to cutting fluid containment and to prevent splashing.
- Cutting fluid should be replaced regularly and disposed in accordance with applicable regulations
- Inadequate cutting fluid or higher cutting speed may require additional containment and ventilation.

WHAT NOT TO DO

Abrasive sawing of beryllium-containing alloys should be avoided.

WHAT ELSE TO CONSIDER

Utilise local exhaust ventilation (LEV) positioned close to and in-line with the source of generated airborne particulate. Direct process exhaust air through a High Efficiency Particulate Air (HEPA) filtering device to the outdoors. Cutting variables such as speeds, feeds and tools should be considered.



Abrasive sawing

Golden rule 1

As always, personal protective equipment, maintenance, housekeeping and workplace exposure characterisation must be implemented.

Golden rule 2

BeST recommends that quantitative and qualitative exposure assessments be conducted by a qualified industrial hygienist or occupational health professional.

Golden rule 3

In case of doubt, always reach out to your supplier for additional guidance.

WANT TO KNOW MORE?

Check out our dedicated website www.berylliumsafety.eu in all European languages or get in contact with us at info@beryllium.eu

WHAT ABOUT THE OTHER GUIDES?

We will continue to provide similar Easy Guide Blasts for all our Be Responsible Guides in the coming months on a regular basis so keep an eye out for our emails! Previous Easy Guide Blasts are available [here](#).