

# Beryllium

Australia | Safework Australia

Manufacturing, Transportation and Warehousing

Beryllium (CAS 7440-41-7) is a grey metal that is found in nature as a mineral with silica and/or aluminium.



Beryllium metal is used in:

- in structural material in space technology
- as an additive to rocket fuels
- as a moderator and reflector in nuclear reactors
- in navigational systems
- in manufacturing.

Beryllium hydroxide is used as feedstock for production of:

- beryllium oxides
- metal and copper beryllium master alloy.

Beryllium oxide is used to manufacture:

- specialty electrical and high-technology ceramics, for example resistor cores
- special glass
- electronic heat sinks
- electron and laser tubes
- electrical insulators
- electronic components, for example circuit chip carriers
- nuclear moderators and fuels
- military vehicle armour
- rocket nozzles
- laser components.



**Baseline Testing**

A baseline beryllium health monitoring medical contains the following tests:

- Demographic, medical and occupational history
- Respiratory function and past exposure questionnaire
- Medical Examination with particular focus on the respiratory and dermatological systems
- Spirometry (lung function) test
- Urinalysis – Blood Protein and Sugar
- Pathology – Urinary beryllium level
- KINNECT Dr Review and Sign off



### Periodic Testing

Periodic medical examinations of workers exposed to beryllium should include work history, medical history and a physical examination with emphasis on the respiratory and dermatological systems.

- Demographic, medical and occupational history
- Respiratory function and past exposure questionnaire
- Medical Examination with particular focus on the respiratory and dermatological systems
- Urinalysis – Blood Protein and Sugar
- Spirometry (lung function) test
- Pathology – Urinary beryllium level
- KINNECT Dr Review and Sign off



### Exit Testing: Termination of work in a Beryllium process

A final beryllium health monitoring medical contains the following tests:

- Demographic, medical and occupational history
- Respiratory function and past exposure

questionnaire

- Medical Examination with particular focus on the respiratory and dermatological systems
- Urinalysis – Blood Protein and Sugar
- Spirometry (lung function) test
- Pathology – Urinary beryllium level
- KINNECT Dr Review and Sign off



### Biological Exposure Windows

**Urine samples should be collected at the end of shift, preferably at the end of the working week.**

Please note this information should be taken into consideration by those planning and administering the health monitoring program.



### Further Information

Safework Australia health monitoring guidance for Beryllium:

<https://www.safeworkaustralia.gov.au/resources-and-publications/guidance-materials/health-monitoring-beryllium>

#### Book & Pay

Book and Pay for your Health Surveillance Medical now.

[Request a Service](#)

#### Set up your Program

Book a discovery session to discuss scoping requirements.

[Contact us](#)