

Benzene

Australia | Safework Australia

Manufacturing, Transportation and Warehousing

Benzene (CAS 71-43-2) is a clear, colourless and highly flammable liquid. It is a sweet-smelling hydrocarbon and a natural part of crude and refined petroleum.



Benzene is a solvent used in manufacturing, paints, varnishes, lacquer thinners and gasoline. The primary routes of benzene exposure are via inhalation and skin absorption.

Accidental ingestion may be possible, especially when eating or smoking with contaminated hands.

Examples of work activities involving benzene that may require special attention when assessing exposure include, refining operations, chemical manufacturing, handling storage and transport of petrol, motor vehicle repairs, plastics and rubber manufacturing, steel production and firefighting.



Baseline Testing

A baseline benzene health monitoring medical contains the following tests:

- Demographic, medical and occupational history
- Past exposure questionnaire
- Medical Examination
- Urinalysis – Blood Protein and Sugar
- Pathology –
 - Full Blood Count (FBC)
 - MBA20 (Full blood examination, serum creatinine)
 - Urinary S-pma (phenylmurcapturic acid)
 - Urinary t,t-MA (Trans Trans Muconic Acid)
- KINNECT Dr Review and Sign off



Periodic Testing

Biological Monitoring should be conducted as per risk assessment.

2 Biological markers are used for this monitoring, dependent on the risk level and levels of S-pma Pathology.

- Urinary S-pma (phenylmurcapturic acid) ·
- Urinary t,t-MA (Trans Trans Muconic Acid)
- KINNECT Dr review and Sign off

** Results may trigger an early periodic health assessment*



Post Incident Testing

Post Incident Pathology:

- Blood Benzene
- MBA 20 and FBC
- KINNECT Dr Review and sign off

** Results may trigger an early periodic health assessment*



Exit Testing

The final exit medical consists of:

- Demographic, medical and occupational history
- Past exposure questionnaire
- Medical Examination
- Pathology –
 - Full Blood Count (FBC)
 - MBA20 (Full blood examination, serum creatinine) non fasting
 - Benzene Blood screen
- KINNECT Dr Review and Sign off



Biological Exposure Windows

A spot urine test for S-PMA should be performed at the end of a work shift.

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 Benzene:

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

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](#)