

Muconic acid tt MA

General:

t,t-Muconic acid is a minor metabolite of benzene and an important urinary biomarker. Benzene products are diffuse atmospheric micro-pollutants with known carcinogenic activity on humans. About 2% of benzene inhaled is excreted into the urine as MA. The investigation of urinary trans,trans-muconic acid (t,t-MA), compared with S-phenylmercapturic acid (S-PMA) allows to biomonitor concentrations of occupational benzene toxicants. t,t-MA concentrations in urine correlate linearly with time weighted average benzene concentrations in the breath zone air of workers, i.e. in oil plants, petrol stations and shoe factories. *See also Phenylmercapturic acid.*

Indication: monitoring of benzene toxicants in air

Material: 10 ml urine

Preanalytics: 24 hrs collection period

TAT: 5-7 days*

Method: GCMS

Units: mg/l

Ref.- range: <0.5 exposure equivalent for cancerogenic substances in industrial place of employment (according to German standards for industrial medicine) is 2.0 muconic acid for 3.3 mg/m³ benzene.

For complete list of laboratory test offered at Freiburg Medical Laboratory, please visit <http://www.fml-dubai.com/parameter-listings/>