

## Tin, Sn

### General:

Tin is classified as a semimetal, as its chemical properties range from metals to non-metals, just as the semiconductors silicon and germanium do.

Tin plays no known natural biological role in humans, and possible health effects of tin are a subject of dispute. Tin itself is not toxic but most tin salts are. The corrosion of tin plated food cans by acidic food and beverages has caused several intoxications with soluble tin compounds. Nausea, vomiting and diarrhea have been reported after ingesting canned food containing 200 mg/kg of tin.

Organotin compounds are very toxic. Tri-n-alkyltins are phytotoxic and, depending on the organic groups, can be powerful bactericides and fungicides. Other triorganotins are used as miticides and acaricides.

The following tests are available:

- **Tin in serum**

Material: 1 ml serum

TAT: 2 weeks\*

Method: AAS

Units: µg/l

Ref.- range: <2.0

- **Tin in urine**

Material: 10 ml urine

TAT: 2 weeks\*

Method: IPMS

Units: µg/l

Ref.- range: <2.0

- **Tin in stool**

Material: 5 g stool

TAT: 2 weeks\*

Method: IPMS

Units: µg/kg stool

Ref.- range: <640

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