

## PRODUCT STEWARDSHIP SUMMARY

# Tin tetrafluoroborate solution 50 %



Chemical Name:	Tin(II) tetrafluoroborate
Synonyms:	Tin bis(tetrafluoroborate), tin(2+) tetrafluoroboranuide, Borate(1-), tetrafluoro-, tin(2+) (2:1), Borate(1-), tetrafluoro-, tin(2++) (2:1)
CAS Number:	13814-97-6
CAS Name:	Tin bis(tetrafluoroborate)
EC (EINECS) Number:	237-487-6
Last Revision Date:	February 2019

- Tin(II) tetrafluoroborate solution 50% is used in electrolytic tin plating.
- This mixture is predominantly composed of tin(II) tetrafluoroborate and water, with tetrafluoroboric acid composing approximately 3%.
- The primary exposure to this product occurs in the industrial setting. For workers, good manufacturing and industrial hygiene practices should be followed to prevent or reduce exposure. Workplace exposure limits for tin(II) tetrafluoroborate solution 50% have been established for use in worksite safety programs. See the Safety Data Sheet (SDS) for additional information.
- Tin(II) tetrafluoroborate solution 50% is a colorless, odorless liquid, completely soluble in water and stable under normal conditions although very corrosive to metals. In contact with fire, tin tetrafluoroborate solution 50% decomposes to release hazardous hydrogen fluoride, as well as boron and tin oxide fumes.
- This product is harmful if swallowed and may cause severe nasal and upper respiratory tract irritation as well as serious eye irritation. Tin(II) tetrafluoroborate solution 50% may cause allergic skin reactions. The health effects of the release of free fluoride ion from fluoroborates that make up this mixture is similar to that of hydrofluoric acid. Ingestion and significant inhalation exposure can cause severe systemic effects including hypocalcemia, hypomagnesemia and hyperkalemia resulting in electrolyte imbalance and cardiac arrhythmias.

- There are no currently known reproductive, genotoxic, or carcinogenic hazards associated with tin(II) tetrafluoroborate solution 50%. Tin(II) tetrafluoroborate solution 50% is not identified as a known or anticipated carcinogen by NTP, IARC or OSHA.
- This product is considered to be harmful to aquatic organisms. Tin tetrafluoroborate solution 50% is an inorganic substance and, therefore, biodegradability data is not relevant.
- Please **contact us** for more information. Additional information may also be found at the following links:

**European Chemicals Agency- Registration Dossier- tin(II) bis(tetrafluoroborate)**

**Haz-Map- Stannous fluoborate**

**Pubchem – tin(II) tetrafluoroborate**

This product stewardship summary is intended to give general information about the chemical or categories of chemicals addressed. It is not intended to provide an in-depth discussion of all health and safety information. Additional information on the chemical is available through the applicable Material Safety Data Sheet which should be consulted before use of the chemical. The product stewardship summary does not supplant or replace required regulatory and/or legal communication documents. Statements concerning use of our products are made without warranty that any such use is free of patent infringement and are not recommendations to infringe any patent.