

PRODUCT STEWARDSHIP SUMMARY

Tetrafluoroboric acid 50%

HBF₄

Chemical Name:	Tetrafluoroboric acid 50%
Synonyms:	Fluoboric acid; Hydrogen tetrafluoroborate; Hydrofluoboric acid
CAS Number:	16872-11-0
CAS Name:	
EC (EINECS) Number:	240-898-3
Last Revision Date:	February 2019

- Tetrafluoroboric acid is used in various laboratory applications including processes where it is used as a catalyst to prepare acetals and in the production of diazo salts and fluoborate. This product also has industrial manufacturing applications. It is used in electroplating, in metal cleaning before welding and as a stripping solution for the removal of solder.
- Exposure to tetrafluoroboric acid can occur in laboratories and industrial/ manufacturing facilities where the chemical solution is handled. Workers risk exposure primarily through dermal and ocular contact, but exposure can also occur via inhalation of vapors. Good manufacturing and industrial hygiene practices should be followed to prevent or reduce contact. Workplace exposure limits for tetrafluoroboric acid have been established for use in worksite safety programs. See the Safety Data Sheet (SDS) for additional information.
- Tetrafluoroboric acid is a colorless, odorless liquid which is completely miscible
 in water. It is stable under normal conditions, but due to its very low pH (0.1 at
 20°C) the substance is corrosive to metals. Overheating of tetrafluoroboric acid
 should be avoided to prevent thermal decomposition including the production
 of hydrogen fluoride and boron oxides.
- Severe injury can result from contact with tetrafluoroboric acid solutions
 resulting in skin burns and serious, irreversible eye damage. Ingestion and
 significant inhalation exposure can cause severe systemic effects including
 hypocalcemia, hypomagnesemia and hyperkalemia resulting in electrolyte
 imbalance and cardiac arrhythmias.

- Tetrafluoroboric acid is not genotoxic based on genetic assays.
- Tetrafluoroboric acid is not known to cause reproductive or developmental harm.
- Tetrafluoroboric acid is not considered a known or anticipated carcinogen by OSHA. NTP or IARC.
- Tetrafluoroboric acid is relatively nontoxic to aquatic life. It is an inorganic substance and, therefore, biodegradability data is not relevant. Nonetheless, Tetrafluoroboric acid should not be disposed or emptied into surface water or sanitary sewer systems
- Please **contact us** for more information. Additional information may also be found at the following links:

National Oceanic and Atmospheric Administration; CAME) Chemicals— Fluoroboric acid

National Institute of Health; Hazardous Substances Data Bank (HSDB)—Fluoboric acid

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.



