Honeywell

PRODUCT STEWARDSHIP SUMMARY

Lead tetrafluoroborate solution 50 %

B_2F_8Pb

Chemical Name:	Lead(II) tetrafluoroborate, lead(2+) ditetrafluoroborate
Synonyms:	Lead bis(tetrafluoroborate)
CAS Number:	13814-96-5
CAS Name:	Lead bis(tetrafluoroborate)
EC (EINECS) Number:	237-486-0
Revision Date:	February 2019

- Lead tetrafluoroborate solution 50% is an electroplating material used for decorative purposes on other metals or as a corrosion inhibitor. Electroplating allows industrial manufacturers to use less expensive metals or plastics as the base of their products while applying a thin layer of a more expensive metal on top of this base for aesthetic purposes, protection, as well as other physicochemical purposes.

- This mixture is predominantly composed of lead tetrafluoroborate and water, with tetrafluoroboric acid and fluoroborates composing approximately 6%.

- Given its primary uses, exposure to this chemical occurs mainly in the industrial setting. Good manufacturing and industrial hygiene practices should be followed to prevent or reduce exposure. Workplace exposure limits for this product have been established for use in worksite safety programs. See the Safety Data Sheet (SDS) for additional information.

- Lead 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, lead tetrafluoroborate solution 50% decomposes to release hazardous hydrogen fluoride, as well as boron and lead oxides that should not be inhaled.

- This product is harmful if swallowed or inhaled and causes severe skin burns and eye damage. Prolonged or repeated exposure may cause damage to the kidneys, blood, and nervous system. The health effects of the release of free fluoride ion from fluoroborates that make up this mixture is similar

to that of hydrofluoric acid. Exposure to large areas of skin, ingestion and significant inhalation exposure can cause severe systemic effects including hypocalcemia, hypomagnesemia and hyperkalemia resulting in electrolyte imbalance and cardiac arrhythmias.

- Due to its lead content, this mixture is anticipated to be a carcinogen in humans based on studies conducted by NTP and IARC.
- This product may impair fertility and cause birth defects.
- This product is expected to be toxic to aquatic organisms. Lead tetrafluoroborate solution 50% is an inorganic substance and, therefore, biodegradability data is not relevant. However, given the toxicity of its components, its discharge into the environment must be avoided nor should it be flushed into surface water or sewer systems. The respective authorities should be informed if this product contaminates rivers or lakes.
- Please **contact us** for more information. Additional information may also be found at the following links:

  European Chemicals Agency- registration dossier- Lead bis(tetrafluoroborate)

  Toxnet - Lead fluoroborate

  Pubchem – Lead tetrafluoroborate

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