

Lead Methanesulfonate

Product Stewardship Summary

December 2012



Chemical Name:	Lead methanesulfonate
Chemical Category (if applicable):	Metal salt
Synonyms:	Methanesulfonic acid, lead(2+) salt; Lead(II) bis(methanesulfonate); Lead methane sulfate; Lead methyl sulfonate; Lead(II) methanesulfonate; Lead(II) methanesulphonate; and Methanesulfonic acid, lead(II) salt
CAS Number:	17570-76-2
CAS Name:	Methanesulfonic acid, lead(2+) salt (2:1)
EC (EINECS) Number:	401-750-5
Other identifier (Please specify):	GPS0072

- Lead methanesulfonate is used in plating processes (both electrolytic and electroless) for electronic components, such as printed circuit boards. A low alpha particle-emitting lead methanesulfonate is used in sensitive semiconductor tin-lead plating. Electroplating is a process for applying a metallic coating on a metal surface by electrodeposition from a suitable electrolyte solution for imparting corrosion resistance and direct production of printed circuit boards without etching out of a piece of copper sheet. Lead methanesulfonate is also used for batteries in special applications.
- Exposure can occur at either a lead methanesulfonate manufacturing facility or at other manufacturing, packaging or storage facilities that handle lead methanesulfonate. Persons involved in maintenance, sampling and testing activities, or in the loading and unloading of lead methanesulfonate packages are at risk of exposure, but worker exposure can be controlled with the use of proper general mechanical ventilation and personal protective equipment. According to the industry, there is no worker inhalation exposure during the production or processing of lead methanesulfonate, as this chemical remains in aqueous solution. Workplace exposure limits for lead have been established for use in worksite safety programs. Please see the MSDS for additional information. The general public or consumers will not be exposed to lead methanesulfonate itself; however, exposure to elemental lead is still possible.
- Lead methanesulfonate is a colorless liquid that is stable under normal conditions of use and storage. It is corrosive to metals. Hazardous decomposition products formed under fire conditions include sulfurous oxides and metal oxide fumes.
- Lead methanesulfonate can be irritating to the skin and upper respiratory system, and may cause serious damage to the eyes. Short-term ingestion or inhalation of aerosolized lead methanesulfonate can cause toxic effects on the blood and central nervous system, resulting in

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.

hemolytic anemia, nervous disorders, and kidney impairment. Typical manifestations of lead poisoning include weakness, irritability, nausea, abdominal pain with constipation and anemia.

- Long-term or repeated exposure to lead methanesulfonate may result in toxic effects of the blood, bone marrow, cardiovascular system, kidneys and nervous system, resulting in anemia, an increase of blood pressure, paralysis, kidney impairment and behavioral effects.
- Lead methanesulfonate contains lead, a substance known to cause reproductive and developmental toxic effects, such as impaired fertility and harm to the unborn child.
- Lead methanesulfonate is a lead compound that is *reasonably anticipated to be a human carcinogen* based on limited evidence of carcinogenicity from studies of other lead compounds in humans and sufficient evidence of carcinogenicity from studies in experimental animals.
- Exposure to lead methanesulfonate in the environment could potentially occur at sites of production and plating sites. However, once released into the environment the exposure would be to lead metal or lead ions rather than the specific substance itself. Lead methanesulfonate is soluble in water, and lead from this substance is expected to be toxic to aquatic and terrestrial organisms (e.g., fish, invertebrates, algae, bivalves, amphibians, worms, and birds). Contamination of waterways and soil may result in long-term adverse effects. Lead may bioaccumulate in tissues of aquatic and terrestrial organisms.
- Please [contact us](#) for more information. Additional information may also be found at the following links:
 - [European Chemicals Agency, SVHC Support Document – Lead\(II\) bis\(methanesulfonate\)](#)
 - [ATSDR Toxicology Profile for Lead](#)
 - [International Agency for Research on Cancer \(IARC\) - Inorganic & Organic Lead Compounds](#)
 - [NTP 12th Report on Carcinogens - Lead & Lead Compounds](#)

