

LEAD

What is Lead (Pb)?

- Can be found in parts of the environment due to human activities such as burning fossil fuels, mining and manufacturing.
- Exposure can occur from water contamination from plumbing, lead paint in older homes, and certain candies, toys, and medicines from foreign countries.
- Exposure can also result from hobbies such as target shooting, ceramics, making stained glass and melting lead for fishing weights.
- Lead can enter the environment through releases from mining lead and other metals and from factories that use it.
- Lead is released into the air during burning coal and oil.
- Children are more vulnerable to lead poisoning than adults.

Common Uses

- Used in battery production, ammunition, metals, and devices to shield X-rays, foundries, lead soldering, certain manufacturing settings, vinyl miniblinds, costume jewelry, cosmetics such as kohl, and some imported spices.
- Commonly found in old paint dust, contaminated soil, contaminated drinking water.
- Pigment in paints, dyes, ceramic glazes, and caulk.
- Commonly found in pipes, storage batteries, weights, shot and ammunition, fishing sinkers, and cable covers.
- Largest use for lead is in storage batteries in cars and other vehicles.

Chemical Information

- Naturally occurring in the Earth's crust.
- Heavy, bluish-gray metal.
- Toxic by ingestion and inhalation of dust or fume.
- Probable human carcinogen.

Stability & Reactivity

- Can react vigorously with oxidizing materials.
- Incompatible with sodium azide (NaN_3) and zirconium.
- Reacts with hot concentrated nitric acid, and with boiling concentrated hydrochloric or sulfuric acid.





Handling & Storage

- Avoid contact with oxidizers such as peroxides, chlorates, and nitrates.
- Avoid chemically active metals such as potassium, sodium, magnesium, and zinc.
- Store in tightly closed containers in a cool area.

Hazards Identification

ACUTE EXPOSURE:

- Can produce anorexia, constipation, abdominal pain, and vomiting.
- May cause muscle weakness with muscle and joint pain.
- Can cause fatigue, headaches, irritability, loss of appetite, mood changes, and memory loss.

CHRONIC EXPOSURE:

- Has been associated with alterations in kidney function and anemia.
- Can cause hypertension.
- May also result in anxiety, depression, headache, tiredness, reproductive issues, and memory problems.
- Children may experience brain and nervous system damage, slowed growth and development and learning, behavior, hearing and speech problems.
- Causes decreased performance in the function of the nervous system.
- At high levels of exposure, lead can cause brain damage and death.
- Likely carcinogen.



For assistance managing exposures to hazardous substances, please call North Carolina Poison Control at 1-800-222-1222.

In case of a life threatening emergency, dial 9-1-1 immediately.



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