

ACETONE FACT SHEET

North Carolina Division of Public Health • Occupational and Environmental Epidemiology Branch

Chemical Information

- 43rd highest-volume chemical produced in the United States.
- Toxic by inhalation and ingestion.
- Flammable, dangerous fire risk.
- Evaporates easily and dissolves in water.
- Occurs naturally in trees, plants, volcanic gases, forest fires and a product of body fat breakdown.
- Present in vehicle exhaust, landfill sites and tobacco smoke.
- Used to make plastic, drugs, fibers, and other chemicals; used to dissolve other substances.
- Also used in some nail polish, paint and varnish removers.

Hazards Identification

Acute Exposure:

- Can cause ear, nose, throat and eye irritation when inhaled.
- May also cause headaches, light-headedness, confusion, nausea, and vomiting.
- May cause skin irritation.
- Can result in unconsciousness and damage to skin in mouth if ingested.
- The Environmental Protection Agency (EPA) Acute Exposure Guideline Level 1 (AEGL - 1) for acetone is 200 ppm for an 8-hour period.

Chronic Exposure:

- No reports of long-term effects in humans related to inhalation exposure.

Stability & Reactivity

- Incompatible with oxidizers and acids.
- Reacts violently with bromoform, chloroform plus alkalies, bromine, and sulfur dichloride.

Handling & Storage

- Store in closed containers.
- Typically stored in steel tanks.
- Keep away from heat, sparks, and flames.

Glossary

The Environmental Protection Agency (EPA) defines Acute Exposure Guideline Levels (AEGLs) as threshold exposure limits for the general public that are applicable to emergency exposure periods ranging from 10 minutes to 8 hours. The three AEGLs are defined as follows:

AEGL-1 – airborne concentration of a substance at which the general population could experience notable discomfort, irritation or certain asymptomatic non-sensory effects.

AEGL-2 – airborne concentration of a substance at which the general population could experience irreversible or other serious, long-lasting adverse health effects or an impaired ability to escape.

AEGL-3 – airborne concentration of a substance at which the general population could experience life threatening health effects or death.

