

Common Name: **ALDOL**

Synonyms: Acetaldo; 3-Hydroxybutanal

CAS No: 107-89-1

Molecular Formula: C₄H₈O₂

RTK Substance No: 0032

Description: Thick, colorless to pale yellow liquid

HAZARD DATA

Hazard Rating	Firefighting	Reactivity
3 - Health 2 - Fire 1 - Reactivity DOT#: UN 2839 ERG Guide #: 153 Hazard Class: 6.1 (Toxic)	COMBUSTIBLE LIQUID Use dry chemical, CO ₂ , water spray or alcohol-resistant foam as extinguishing agents. POISONOUS GASES ARE PRODUCED IN FIRE. Use water spray to keep fire-exposed containers cool.	Aldol reacts violently with OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE). Aldol reacts with METALS to form flammable and explosive <i>Hydrogen gas</i> .

SPILL/LEAKS

Isolation Distance:

Spill: 50 meters (150 feet)

Fire: 800 meters (1/2 mile)

Absorb liquids in dry sand, earth, or a noncombustible material and place into sealed containers for disposal.

PHYSICAL PROPERTIES

Flash Point:	150 °F (66 °C)
Auto Ignition Temp:	482 °F (250 °C)
Vapor Density:	3 (air = 1)
Vapor Pressure:	21 mm Hg at 68 °F (20 °C)
Specific Gravity:	1.1 (water = 1)
Water Solubility:	Soluble
Boiling Point:	174 ° to 176 °F (79 ° to 80 °C)
Molecular Weight:	88.1

EXPOSURE LIMITS

No occupational exposure limits have been established for **Aldol**.

PROTECTIVE EQUIPMENT

Gloves:	Butyl and Viton/Butyl (>8-hr breakthrough for <i>Aldehydes, aliphatic</i>)
Coveralls:	Tychem® BR, CSM and TK (>8-hr breakthrough for <i>Aldehydes, aliphatic</i>)
Respirator:	SCBA

HEALTH EFFECTS

Eyes:	Irritation
Skin:	Irritation
Inhalation:	Headache, dizziness, and passing out

FIRST AID AND DECONTAMINATION

Remove the person from exposure.
Flush eyes with large amounts of water for at least 15 minutes. Remove contact lenses if worn.
Quickly remove contaminated clothing and wash contaminated skin with large amounts of water.
Begin artificial respiration if breathing has stopped and CPR if necessary.
Transfer promptly to a medical facility.