

Common Name: **GLUTARALDEHYDE**

Synonyms: 1,3-Diformylpropane; Glutaral; Cidex®; Procide®

CAS No: 111-30-8

Molecular Formula: C₅H₈O₂

RTK Substance No: 0960

Description: Colorless glass-like crystals that are usually in a 2% to 50% water solution

HAZARD DATA

Hazard Rating	Firefighting	Reactivity
2 - Health 0 - Fire 0 - Reactivity DOT#: UN 2810 ERG Guide #: 153 Hazard Class: 6.1 (Poison)	Extinguish fire using an agent suitable for type of surrounding fire. Glutaraldehyde itself does not burn. POISONOUS GASES ARE PRODUCED IN FIRE. Use water spray to keep fire-exposed containers cool.	Glutaraldehyde is not compatible with OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE); STRONG BASES (such as SODIUM HYDROXIDE and POTASSIUM HYDROXIDE); AMINES; ALCOHOLS and KETONES.

SPILL/LEAKS

Isolation Distance:

Spill (Small): 30 meters (100 feet)

(Large): 60 meters (200 feet)

Fire: 800 meters (1/2 mile)

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

DO NOT wash into sewer.

Glutaraldehyde is very toxic to aquatic organisms.

PHYSICAL PROPERTIES

Odor Threshold:	0.04 ppm
Flash Point:	Nonflammable
Vapor Density:	3.4 (air = 1)
Vapor Pressure:	17 mm Hg at 68°F (20°C); <0.1 mm Hg at 68°F (20°C) for <i>solutions</i>
Specific Gravity:	1.1 (water = 1)
Water Solubility:	Soluble
Boiling Point:	369° to 372°F (187° to 189°C)
Freezing Point:	<20°F (<-7°C)
Molecular Weight:	100.1

EXPOSURE LIMITS

NIOSH: 0.2 ppm; Ceiling

ACGIH: 0.05 ppm; Ceiling

The Protective Action Criteria values are:

PAC-1 = 0.2 ppm PAC-2 = 1 ppm

PAC-3 = 5 ppm

PROTECTIVE EQUIPMENT

Gloves:	Butyl, Neoprene, Viton and Barrier® (>8-hr breakthrough)
Coveralls:	Tychem® fabrics (>8-hr breakthrough)
Respirator:	SCBA

HEALTH EFFECTS

Eyes:	Irritation and burns
Skin:	Irritation and burns
Inhalation:	Nose, throat and lung irritation with coughing and wheezing and shortness of breath Headache, nausea and vomiting.

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. Seek medical attention.
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.