

EMS CATALOG NO: 15990
EMS PRODUCT: Bouins Fixative
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MATERIAL SAFETY DATA SHEET

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FOR PRODUCT AND SALES INFORMATION

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PRODUCT IDENTIFICATION

PRODUCT NAME: Bouin Fixative
CHEMICAL FAMILY: N/A

FORMULA:	CAS#	PERCENT
Picric Acid	88-89-1	0.75
Formaldehyde	50-00-0	2.5
Acetic Acid	64-19-7	0.5
Water		97.25

HAZARDOUS INGREDIENTS

PRINCIPAL HAZARDOUS COMPONENT(S) (CHEMICAL AND COMMON NAME(S)):

Picric Acid	LD50 in frogs:	200 mg/kg
Formaldehyde	LD50 oral rat:	800 mg/kg
Acetic Acid	LDLO oral human:	5 mg/kg

LDLO oral rabbit: 120 mg/kg

PHYSICAL DATA

BOILING POINT: 110oC
 SPECIFIC GRAVITY: 1.3
 VAPOR PRESSURE (mm Hg): 1
 PERCENT VOLATILE BY VOLUME %: 100
 VAPOR DENSITY (AIR=1): 3.68
 EVAPORATION RATE (RATE ---- =1): 0.97
 SOLUBILITY IN WATER: Yes
 REACTIVITY IN WATER: No
 APPEARANCE AND ODOR: Clear yellow liquid and pungent suffocating strong vinegar like odor.

FIRE AND EXPLOSION DATA

FLASH POINT: 40°C
 FLAMMABLE LIMIT IN
 AIR % BY VOLUME: LOWER: 7%
 UPPER: 73%
 EXTINGUISHING MEDIA: Water, fog or spray, carbon dioxide, dry chemical, alcohol foam.
 AUTO IGNITION TEMPERATURE: N/A
 SPECIAL FIRE FIGHTING PROCEDURES:
 Severe explosion risk from shock or rapid heating.
 Fight fires from explosion resistant location. Use water spray to knock down irritating vapors.
 UNUSUAL FIRE AND EXPLOSION HAZARDS:
 If fire cannot be controlled - evacuate area. If fires occur in vicinity - keep cool with water. Formaldehyde solutions may release methanol vapors.

PHYSICAL HAZARDS

STABILITY: Stable
 CONDITIONS TO AVOID: Dryness, heat, shock.
 INCOMPATIBILITY: Strong caustics, nitrogen dioxide, aniline, potassium hydroxide, ammonia, metals, nitric acid.

HAZARDOUS DECOMPOSITION PRODUCTS:

Toxic fumes of carbon monoxide. Toxic oxides of carbon.

HAZARDOUS POLYMERIZATION: N/A

CONDITIONS TO AVOID: N/A

HEALTH HAZARDS

SIGNS AND SYMPTOMS OF EXPOSURE: Highly toxic by inhalation and ingestion - oliguria and anuria may occur.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: N/A

EMERGENCY AND FIRST AID PROCEDURES USED:

INHALATION: Remove to fresh air, give oxygen if available.

EYES: Wash with copious amounts of water.

SKIN: Wash with copious amounts of soap and water.

INGESTION: Get medical assistance quickly. DO NOT induce vomiting.

SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Self contained breathing apparatus

VENTILATION:

LOCAL EXHAUST: Yes

MECHANICAL (GENERAL): Hood

PROTECTIVE GLOVES: Yes

EYE PROTECTION: Goggles

OTHER PROTECTIVE CLOTHING

OR EQUIPMENT: Protective apron/full face shield.

SPECIAL PRECAUTIONS AND SPILL PROCEDURES**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:**

Keep in a cool place.

Remote from fire.

Protect against physical damage.

STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED OR RELEASED:

Take up with vermiculite and containerize for proper disposal.
Flush with water and dilute ammonia to remove any residual odor.

**WASTE DISPOSAL METHODS IN COMPLIANCE WITH LOCAL, STATE, AND
FEDERAL REGULATIONS.**