

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Zinc Formalin

SYNONYMS: Zinc unbuffered formalin

CATALOG CODES: VFZ

MANUFACTURER: Volu-Sol

ADDRESS: 5095 West 2100 South
Salt Lake City, UT 84120

EMERGENCY PHONE: (800) 535-5053

OTHER CALLS: (801) 974-9474

FAX: (801) 974-9553

CHEMICAL FAMILY: -

CHEMICAL FORMULA: -

PREPARED BY: Volu-Sol

RECOMMENDED USE: Laboratory chemicals

RESTRICTIONS ON USE: Use as recommended

SECTION 2: HAZARD(S) IDENTIFICATION

EMERGENCY OVERVIEW:

GHS Classification: Skin corrosion (Category 2)
Serious eye damage (Category 1)
Skin sensitization (Category 1)
Carcinogenicity (Category 1A)
Specific target organ toxicity (Category 1)
Single Exposure – Respiratory system, CNS

GHS LABEL ELEMENTS:



Pictogram: 

Signal Word: Danger

Hazard Statement(s):

H315 Causes skin irritation
H317 May cause an allergic skin reaction
H318 Causes serious eye damage
H350 May cause cancer
H370 Causes damage to organs

Precautionary Statement(s):

P201 Obtain special instructions before use
P202 Do not handle until all safety precautions have been read and understood
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray
P264 Wash skin thoroughly after handling
P270 Do not eat, drink or smoke when using this product
P272 Contaminated work clothing should not be allowed out of the workplace
P280 Wear protective gloves/ eye protection/ face protection
P281 Use personal protective equipment as required
P302+P352 IF ON SKIN: Wash with plenty of soap and water
P307+P311 IF exposed: Call a POISON CENTER or doctor/physician
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P308+P313 IF exposed or concerned: Get medical advice/attention
P310 Immediately call a POISON CENTER or doctor/physician
P321 Specific treatment (see supplemental first aid instructions on this label)
P333+P313 If skin irritation or rash occurs: Get medical advice/attention
P362 Take off contaminated clothing and wash reuse
P363 Wash contaminated clothing before reuse
P405 Store locked up
P501 Dispose of contents/container to an approved waste disposal plant

OTHER HAZARDS: -
HMIS Classification:

Health hazard: 3
Chronic health hazard: -
Flammability: 1
Physical hazards: 0

NFPA Rating:
Health hazard: 3
Fire: 1
Reactivity Hazard: 0

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT	CAS NO. EC-NO. Index-NO.
Zinc sulfate (<1 %)	7733-02-0 231-793-3 030-006-00-9
Formaldehyde (3 - 5 %)	50-00-0 200-001-8 605-001-00-5
Methyl alcohol (1-2 %)	67-56-1 200-659-6 603-001-00-X

SECTION 4: FIRST AID MEASURES

INHALATION: Immediate medical attention is not required. If symptoms persist, call a physician. Move to fresh air in case of accidental inhalation of vapors or decomposition products

INGESTION: Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician

SKIN: Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician

EYE: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR: **Percentage by Volume**
Upper: %
Lower: %

FLASH POINT: 93.3 °C / 199.9 °F

AUTOIGNITION TEMPERATURE:

EXTINGUISHING MEDIA: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

FIRE FIGHTING PROCEDURES: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode

FIRE AND EXPLOSION HAZARDS: No data available

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Use personal protective equipment. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Pay attention to flashback. Take precautionary measures against static discharges. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Soak up with inert absorbent material. Keep in suitable, closed containers for disposal

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Pay attention to flashback. Take precautionary measures against static discharges. Contents under pressure. Do not take internally. Avoid contact with clothing. Keep away from heat and sources of ignition. Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat. Keep in properly labeled containers

INCOMPATIBILITIES: Strong oxidizing agents

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS: Reported in a time-weighted average (TWA)

Component	CAS-No.	OSHA		ACGIH	
		ppm	mg/m ³	ppm	mg/m ³
Formaldehyde	50-00-0	0.75		0.16	
		PEL		TLV	
Methanol	67-56-1	200	260	200	
		PEL	PEL	TLV	

VENTILATION SYSTEM: Local and/or general exhaust is recommended to keep exposure below limits. Local exhaust ventilation is preferred for control of the emissions at its source, preventing dispersion into the general work area. Please refer to the ACGIH document, *Industrial Ventilation: A Manual of Recommended Practices*, for details

PERSONAL RESPIRATORS: If exposure limit is exceeded and engineering controls are not feasible, a half-face organic vapour respirator may be worn for up to ten times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier; whichever is lowest. A full-face piece organic vapour respirator may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-face, positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres

SKIN PROTECTION: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands

EYE PROTECTION: Tightly fitting safety goggles. Face shield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide adequate general and local exhaust ventilation. Material should be handled in a laboratory hood whenever possible

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: liquid
ODOR: -
SOLUBILITY: -
pH: -
BOILING POINT: -
MELTING POINT: -
VAPOR PRESSURE: -
DENSITY: -
VISCOSITY: -
REFRACTIVE INDEX: -

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under recommended conditions of use and storage

CONDITIONS TO AVOID: Excess heat. Heating in air
HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Carbon monoxide (CO), Carbon dioxide (CO₂), formaldehyde

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

Acute Toxicity: No data available
Skin/Eye Irritation: No data available
Carcinogenicity:
IARC: 1 - Group 1: Carcinogenic to humans (Formaldehyde)
NTP: Known - Known to be human carcinogen (Formaldehyde)
OSHA: OSHA specifically regulated carcinogen (Formaldehyde)

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Toxicity: No data available
Persistence and degradability: No data available
Mobility in soil: No data available
PBT/vPvB Results: No data available

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Dispose of as unused product

SECTION 14: TRANSPORT INFORMATION

US DOT	IATA	IMDG/IMO
Not dangerous goods		

SECTION 15: REGULATORY INFORMATION

SARA 302	50-00-0
SARA 313	50-00-0, 67-56-1, 7733-02-0
SARA 311/312 Hazards	Acute Health Hazard, Chronic Health Hazard
State	Right to know lists: MA: 50-00-0, 67-56-1, 7733-02-0 PA: 7732-18-5, 50-00-0, 67-56-1, 7733-02-0 NJ: 7732-18-5, 50-00-0, 67-56-1, 7733-02-0 California Prop. 65 Components: 50-00-0, 67-56-1

SECTION 16: OTHER INFORMATION

Disclaimer: The information is provided without any representation or warranty, express or implied, regarding the accuracy or correctness. The conditions or methods of handling, storage, use, and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with the handling, storage, use, or disposal of the product.