Volu-Sol SAFETY DATA SHEET

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Formalin 10% Neutral Buffered

SYNONYMS: Formalin, Buffered, 10% (Phosphate Buffer/

Certified), Formalin 10% solution, neutral buffered

CATALOG CODES: VFB MANUFACTURER: Volu-Sol

ADDRESS: 5095 West 2100 South

Salt Lake City, UT 84120

**EMERGENCY PHONE:** (800) 535-5053 OTHER CALLS: (801) 974-9474 (801) 974-9553 FAX:

CHEMICAL FAMILY: CHEMICAL FORMULA: PREPARED BY: Volu-Sol

**RECOMMENDED USE:** Laboratory chemical

**RESTRICTIONS ON USE:** Use as recommended

# SECTION 2: HAZARD(S) IDENTIFICATION

#### **EMERGENCY OVERVIEW:**

**GHS Classification:** Flammable Liquids (Category 4) Skin irritation (Category 2) Serious eve damage (Category 1) Skin sensitisation (Category 1)

Germ cell mutagenicity (Category 2) Carcinogenicity (Category 1A) Specific target organ toxicity (Category 1)

Single Exposure

Specific target organ toxicity (Category 2)

Repeated Exposure

### **GHS LABEL ELEMENTS:**

Pictogram: Signal Word:

Hazard Statement(s):

H227 Combustible liquid H315 Causes skin irritation

H317 May cause an allergic skin reaction H318 Causes serious eye damage Suspected of causing genetic defects H341

H350 May cause cancer H370 Causes damage to organs

H373 May cause damage to organs through prolonged or repeated exposure

Precautionary Statement(s):

Obtain special instructions before use P201

P202 Do not handle until all safety precautions have

been read and understood P210 Keep away from heat/ sparks/ open flames/ hot

surfaces. No smoking Do not breathe dust/ fume/ gas/ mist/ vapours/ P260

spray

P264 Wash skin thoroughly after handling P270 Do not eat, drink or smoke when using this product

Contaminated work clothing should not be allowed P272

out of the workplace Wear protective gloves/ eye protection/ face P280

protection

P281 Use personal protective equipment as required

P302+P352 IF ON SKIN: Wash with plenty of soap and water P305+P351+P338+P310 IF IN EYES: Rinse cautiously with water for several

> minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a

POISON CENTER or doctor/physician

IF exposed: Call a POISON CENTER or doctor/

physician

P314 Get medical advice/attention if you feel unwell P321 Specific treatment (see supplemental first aid

instruction on this label)

P333+P313 If skin irritation or rash occurs: Get medical advice/

attention

P362 Take off contaminated clothing and wash before

P370+P378 In case of fire: Use dry sand, dry chemical or

alcohol-resistant foam for extinction Store in a well-ventilated place. Keep cool

P405 Store locked up

Dispose of contents/container to an approved P501

waste disposal plant

OTHER HAZARDS: -

P403+P235

**HMIS Classification:** 

Health hazard: 3 Chronic health hazard: Flammability: 2 Physical hazards: 0

NFPA Rating:

Health hazard: 3 Fire: 2 **Reactivity Hazard:** 0

#### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT	CAS NO. EC-NO. Index-NO.		
Formaldehyde (<10%)	50-00-0 200-001-8 605-001-00-5		
Methanol (1-2%)	67-56-1 200-659-6 603-001-00-X		

## **SECTION 4: FIRST AID MEASURES**

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult a physician

INGESTION: If swallowed, vomiting may occur spontaneously, but DO NOT INDUCE. If vomiting occurs, keep head below hips to prevent aspiration into lungs. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician

SKIN: Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician

EYE: Continue rinsing eyes during transport to hospital. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician

# SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR: Percentage by Volume

Upper: -% Lower: -%

FLASH POINT: 81°C (177.8°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: Use water spray to cool unopened containers

# SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Use personal protective equipment. Avoid breathing vapours, mist, or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations. Dispose of in accordance with local regulations. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in

P307+P311

excess of reportable quantities. The number to contact the US Coast Guard National Response Center is  $(800)\ 424-8802$ 

#### **SECTION 7: HANDLING AND STORAGE**

HANDLING AND STORAGE: Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use explosion-proof equipment. Keep away from sources of ignition. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Containers of this material may be hazardous when empty since they retain product residues (vapours, liquid); observe all warnings and precautions listed for the product. Take measures to prevent the buildup of electrostatic charge. No smoking

**INCOMPATIBILITES:** 

#### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**EXPOSURE LIMITS:** 

Reported in a time-weighted average (TWA)

Component	CAS-No.	Reference	OSHA		ACGIH	
			ppm	mg/m³	ppm	mg/m³
Formaldehyde 50-0	50-00-0	.75		.3		
	50-00-0	50-00-0	PEL		TLV	
Methanol 67	67-56-1	200	260	200	260	
			PEL	PEL	TLV	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:** Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Use proper glove removal technique to avoid skin contact with this product. Wash and dry hands **EYE PROTECTION:** Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

 APPEARANCE:
 liquid, clear

 ODOR:

 SOLUBILITY:

 pH:

 BOILING POINT:

 MELTING POINT:

 VAPOR PRESSURE:

 SPECIFIC GRAVITY:

 MOLECULAR WEIGHT:

 DENSITY:

 VISCOSITY:

# SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under recommended conditions of use and

storage

**CONDITIONS TO AVOID:** Heat, flames, ignition sources

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: No data available

## SECTION 11: TOXICOLOGICAL INFORMATION

# TOXICOLOGICAL INFORMATION:

Acute Toxicity: No data available
Skin/Eye Irritation: No data available

Carcinogenicity: IARC: 1-Group 1: Carcinogenetic to humans (Formaldehyde)

NTP: Known to be human carcinogen (Formaldehyde)
OSHA: OSHA specifically regulated carcinogen (Formaldehyde)

ROUTES OF ENTRY: Inhalation/Ingestion/Skin

#### SECTION 12: ECOLOGICAL INFORMATION

**ECOLOGICAL INFORMATION:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life

Toxicity: No data available

Persistence and degradability: No data available

Mobility in soil: No data available

**PBT/vPvB Results:** PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

#### SECTION 13: DISPOSAL CONSIDERATIONS

**WASTE DISPOSAL METHOD:** This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dispose of as unused product

#### SECTION 14: TRANSPORT INFORMATION

US DOT	IATA	IMDG/IMO
	Not regulated	

#### **SECTION 15: REGULATORY INFORMATION**

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

#### **SECTION 16: OTHER INFORMATION**

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REFRACTIVE INDEX: