OLU-SOL SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: PVA Fixative, Modified (Mercury Free)

SYNONYMS: **PVA Modified Fixative**

CATALOG CODES: 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, manufacture of substances

RESTRICTIONS ON USE: Use as recommended

SECTION 2: HAZARD(S) IDENTIFICATION

EMERGENCY OVERVIEW:

GHS Classification: Flammable Liquids (Category 3) Skin Corrosion (Category 1A) Serious Eye Damage (Category 1) Specific Target Organ Toxicity (Category 1) Single Exposure - Respiratory system,

Central nervous system, Optic nerve

GHS LABEL ELEMENTS:

Pictogram: Danger

Signal Word: Hazard Statement(s):

> H226 Flammable liquid and vapour

H314 Causes severe skin burns and eye damage

H318 Causes serious eye damage H370 Causes damage to organs

Precautionary Statement(s):

P210 Keep away from heat/sparks/open flames/hot

surfaces. No smoking P233 Keep container tightly closed

P240 Ground/bond container and receiving equipment

P241 Use explosion-proof electrical/ventilating/lighting

equipment

P242 Use only non-sparking tools

P243 Take precautionary measures against static

discharge

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/

P264 Wash skin thoroughly after handling

P270 Do not eat, drink or smoke when using this product P280 Wear protective gloves/protective clothing/eye

protection/face protection

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce

vomiting

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all

contaminated clothing. Rinse skin with

water/shower

P304+P340 IF INHALED: Remove victim to fresh air and keep

at rest in a position comfortable for breathing

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 Immediately call a POISON CENTER or doctor/

physician

P321

Specific treatment (see supplemental first aid instruction on this label)

P363 Wash contaminated clothing before reuse

P370+P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction

P403+P235 Store in a well-ventilated place. Keep cool P405 Store locked up

P501 Dispose of contents/container to an approved

waste disposal plant

OTHER HAZARDS:

HMIS Classification:

Health hazard: Chronic health hazard: Flammability: 3 Physical hazards: 0 NFPA Rating:

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

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT	CAS NO. EC-NO. Index-NO.
Glycerol (1-2%)	56-81-5 200-289-5
Ethanol (25-30%)	64-17-5 200-578-6 603-002-00-5
Acetic acid (5%)	64-19-7 200-580-7 607-002-00-6
Copper sulphate pentahydrate (1-1.5%)	7758-99-8 231-847-6 029-004-00-0

SECTION 4: FIRST AID MEASURES

INHALATION: Remove from exposure, lie down, If breathing is difficult, give oxygen, Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician immediately

INGESTION: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician

SKIN: Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing before re-use. Call a physician immediately

EYE: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required. Keep eye wide open while rinsing

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR: Percentage by Volume

Upper: -% Lower: -%

FLASH POINT: 30 °C (86 °F)

AUTOIGNITION TEMPERATURE:

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

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: Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment. Keep people away from and upwind of spill/leak. Remove all sources of ignition. Take precautionary measures against static discharge. Should not be released into the environment. Avoid release to the environment. Collect spillage. Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Use spark-proof tools and explosion-proof equipment

SECTION 7: HANDLING AND STORAGE

P307+P311

P310

HANDLING AND STORAGE: Do not breathe vapours or spray mist. Use only under a chemical fume hood. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Do not ingest. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. Take precautionary measures against static discharges. Keep containers tightly closed in a dry, cool, and well-ventilated place. Corrosives area. Keep away from heat and sources of ignition

INCOMPATIBILITES: Strong oxidizing agents

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Component	CAS-No. Reference	Poforonco	OSHA		ACGIH	
		Reference	ppm	mg/m³	ppm	mg/m³
Glycerol	56-81-5		1.3	5	3	10
			PEL	PEL	TLV	TLV
Ethanol	64-17-5		200	260	200	
			PEL	PEL	TLV	
Acetic acid	64-19-7		10	25	10	
			PEL	PEL	TLV	
Copper sulphate 7758-99-8					1	
pentahydrate	//56-99-6					TLV

PERSONAL RESPIRATORS: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)

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)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under recommended conditions of use and

storage

CONDITIONS TO AVOID: Incompatible products. Excess heat. Keep away

from open flames, hot surfaces, and sources of

ignition

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: No data available

ROUTES OF ENTRY: -

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: Contains a substance which is: Toxic to aquatic organisms

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: 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. Should not be released into the environment

SECTION 14: TRANSPORT INFORMATION

US DOT	IATA	IMDG/IMO
Shipping Name:	Shipping Name:	Shipping Name:
ETHANOL SOLUTION	ETHANOL SOLUTION	ETHANOL SOLUTION
Hazard Class:	Hazard Class:	Hazard Class:
3	3	3
UN Number:	UN Number:	UN Number:
1170	1170	1170
Packing Group:	Packing Group:	Packing Group:
THE STATE OF THE S	III	III

SECTION 15: REGULATORY INFORMATION

SARA 302	- 3
SARA 313	7758-99-8
SARA 311/312 Hazards	Fire Hazard, Acute Health Hazard, Chronic Health Hazard
1.6	Right to know lists: MA: 56-81-5, 64-17-5, 64-19-7
State	PA: 56-81-5, 64-17-5, 64-19-7, 7758-99-8, 7732-18-5 NJ: 56-81-5, 64-17-5, 64-19-7, 7758-99-8, 7732-18-5 California Prop. 65 Components: 64-17-5

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.