

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** May Grünwald Stain  
**SYNONYMS:** May grünwald giemsa solution  
**CATALOG CODES:** VMY  
**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 chemical

**RESTRICTIONS ON USE:** Use as recommended

## SECTION 2: HAZARD(S) IDENTIFICATION

## EMERGENCY OVERVIEW:

**GHS Classification:** Flammable Liquids (Category 2)  
 Acute Toxicity, Oral (Category 3)  
 Acute Toxicity, Inhalation (Category 3)  
 Acute Toxicity, Dermal (Category 3)  
 Specific target organ toxicity (Category 1)  
 Single Exposure

## GHS LABEL ELEMENTS:

## Pictogram:



## Signal Word:

Danger

## Hazard Statement(s):

H225 Highly flammable liquid and vapour  
 H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled  
 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/ spray  
 P264 Wash skin thoroughly after handling  
 P270 Do not eat, drink or smoke when using this product  
 P271 Use only outdoors or in a well-ventilated area  
 P280 Wear protective gloves/ eye protection/ face protection  
 P301+P310+P330 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth  
 P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
 P304+P340+P311 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician  
 P307+P311 IF exposed: Call a POISON CENTER or doctor/ physician  
 P363 Wash contaminated clothing before reuse  
 P370+P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction  
 P403+P233 Store in a well-ventilated place. Keep container tightly closed  
 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:** 2  
**Chronic health hazard:** -  
**Flammability:** 3  
**Physical hazards:** 0

## NFPA Rating:

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

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT	CAS NO. EC-NO. Index-NO.
Methanol (>95%)	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:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician

**SKIN:** Immediately flush skin with plenty of soap and water. Remove contaminated clothing and shoes, wash before reuse. Consult a physician

**EYE:** Immediately flush eyes with plenty of water for at least 15 minutes. Consult a physician

## SECTION 5: FIRE-FIGHTING MEASURES

**FLAMMABLE LIMITS IN AIR:** **Percentage by Volume**  
 Upper: 36%  
 Lower: 6%

**FLASH POINT:** 9.7 °C / 49.5 °F – closed cup

**AUTOIGNITION TEMPERATURE:** 455.0 °C / 851.0 °F – 760 mmHg

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

**FIRE FIGHTING PROCEDURES:** Wear self-contained breathing apparatus for firefighting if necessary

**FIRE AND EXPLOSION HAZARDS:** Use water spray to cool unopened containers

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**ACCIDENTAL RELEASE MEASURES:** Wear respiratory protection. 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

## 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

**INCOMPATIBILITIES:** Acid chlorides, acid anhydrides, oxidizing agents

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Component	CAS-No.	Reference	OSHA	ACGIH
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			ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Methanol	67-56-1		200 PEL	260 PEL	200 TLV	260 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

<b>APPEARANCE:</b>	liquid
<b>ODOR:</b>	Alcohol-like
<b>SOLUBILITY:</b>	-
<b>pH:</b>	-
<b>BOILING POINT:</b>	-
<b>MELTING POINT:</b>	-
<b>VAPOR PRESSURE:</b>	-
<b>SPECIFIC GRAVITY:</b>	-
<b>MOLECULAR WEIGHT:</b>	-
<b>DENSITY:</b>	-
<b>VISCOSITY:</b>	-
<b>REFRACTIVE INDEX:</b>	-

#### 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:

<b>Acute Toxicity:</b>	Oral human LDLO: 143 mg/kg <b>Remarks:</b> lungs, thorax, or respiration: Dyspnea. Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea Oral rat LD50: 1,187-2,769 mg/kg Inhalation rat LC50: 4 h – 128.2 mg/l Inhalation rat LC50: 6 h – 87.6 mg/l Dermal rabbit LD50: 17,100 mg/kg
<b>Skin/Eye Irritation:</b>	No data available
<b>Carcinogenicity:</b>	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen
<b>ROUTES OF ENTRY:</b>	Inhalation/Ingestion/Skin

#### SECTION 12: ECOLOGICAL INFORMATION

##### ECOLOGICAL INFORMATION:

<b>Toxicity:</b>	Fish	LC50 Mortality (bluegill)	15,400.0 mg/l-96 h
	Oryzia latipes	NOEC	7,900 mg/l-200 h
	Water flea	EC50	>10,000 mg/l-48 h
	Algae	EC50 Growth Inhibition	22,000 mg/l-96 h
<b>Persistence and degradability:</b>			
Biodegradability	Aerobic – Exposure time 5 d Result: 72% - rapidly biodegradable		
BOD	600-1,120 mg/g		
COD	1,420 mg/g		
Theoretical O <sub>2</sub> Demand	1,500 mg/g		
<b>Mobility in soil:</b>	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:** Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved incinerator or disposed in an RCRA approved waste facility. Processing, use, or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state, and local requirements. Dispose of as unused product

#### SECTION 14: TRANSPORT INFORMATION

US DOT	IATA	TDG	IMDG/IMO
Shipping Name: Methanol	Shipping Name: Methanol	Shipping Name: Methanol	Shipping Name: Methanol
Hazard Class: 3	Hazard Class: 3 (6.1)	Hazard Class: 3 (6.1)	Hazard Class: 3 (6.1)
UN Number: 1230	UN Number: 1230	UN Number: 1230	UN Number: 1230
Packing Group: II	Packing Group: II	Packing Group: II	Packing Group: II

#### SECTION 15: REGULATORY INFORMATION

<b>SARA 302</b>	-
<b>SARA 313</b>	67-56-1
<b>SARA 311/312 Hazards</b>	Fire hazard, Acute Health Hazard, Chronic Health Hazard
<b>State</b>	Right to know lists: MA: 67-56-1 PA: 67-56-1 NJ: 67-56-1 California Prop. 65 Components: 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.