

**Section 1. Product and Company Identification**

Item Number.: s2092-1  
 Common Name.: Karnovsky's Fixative  
 Intended Use : In Vitro Diagnostic use. Laboratory Use Only  
 IN CASE OF EMERGENCY, CONTACT: CHEMTREC (24HR) 800-424-9300

Manufacturer.: Poly Scientific R&D Corp.

70 Cleveland Ave  
 Bay Shore NY 11706

polyrnd@polyrnd.com

**Section 2. Hazard Identification**

227 Flammable Liquids Cat 4  
 301 Acute toxicity, oral Cat 3  
 314 Skin corrosion/irritation Cat 1A, B, C  
 317 Sensitiser, Skin Cat 1  
 331 Acute toxicity, inhalation Cat 3



Danger

Combustible liquid. Toxic if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Toxic if inhaled.

Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces.-No smoking. Do not breathe dust/fume/gas/mist/vapours/spray. Wash hands/skin thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. In case of inadequate ventilation wear respiratory protection. In case of fire: Use dry sand, dry chemical or alcohol- resistant foam to extinguish. Collect spillage. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Do not induce vomiting. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Wash with plenty of water and soap/shower. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention. 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. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Keep container tightly closed. Store locked up and in a well-ventilated place and kept cool. Dispose of contents/container to an approved waste disposal plant.

Hazards not otherwise covered by GHS: None

**Section 3. Composition Information**

Exposure Limits(A blank value indicates no information available) The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

Component	CAS#	PEL(mg/m3)	STEL(mg/m3)	CEIL(mg/m3)	Concentration Range
Cacodylic Acid	124-65-2				<5%
Methanol	67-56-1	325.00	260.00		<5%
Gluteraldehyde	111-30-8		0.25		<5%
Formaldehyde	50-00-0	0.37	2.00		<5%

**Section 4. First Aid Measures**

Eye Contact : Check for and remove contact lenses. Wash with large amounts of water for 15 minutes. Seek medical attention.

Skin Contact : Remove contaminated clothing and shoes. Wash the affected area with large with soap and water. Seek medical attention

Ingestion : Give two glasses of water to a conscious victim. Do not induce vomiting. Seek medical attention

Inhalation : Move person to fresh air. If necessary give CPR; warning this could pose a risk of exposure to the rescue breather. Seek medical attention

The most important known symptoms and effects are described in section 2 and/or section 11.

**Section 5. Fire Fighting Measures**

Extinguishing Media.: Dry Chemical, Water Spray, Fog, carbon Dioxide, Alcoholic Foam

Special Fire and Explosion Remarks.: N/A

**Section 6. Accidental Release Measures**

Spill Cleanup and Disposal Special.: Eliminate all ignition sources. Use water spray to disperse vapors. Pick up with absorbent material.

Spill Cleanup.: Take up spills with absorbant material and containerize for proper disposal. Use proper PPE as per section 8. Provide ventilation.

**Section 7. Handling and Storage**

Storage and Handling Special.: Refrigerate

Storage and handling.: Keep container tightly closed. Store in a cool, dry area and protect from physical damage

**Section 8. Exposure Controls/Personal Protection**

Personal Protective Equipment.: Safety Glasses, Gloves, Vapor Respirator

This information is provided as a guide but proper PPE can only be determined by the end user and their situation.

Engineering Controls.: Provide local exhaust ventilation to keep the airborne concentrations of vapors below their respective threshold limit values. Ensure that eyewash stations and safety showers are local to the work-station.

**Section 9. Physical and Chemical Properties**

Appearance.....: Colorless liquid	Evaporation Rate.....: N/A	Water Soluable?.....: Yes
Odor.....: Pungent, suffocating	Upper Flammability Limit (%): N/A	Volatile Percent.....: 100
Odor Threshold.....: N/A	Lower Flammability Limit (%): N/A	Partition Coefficient.....: n-octanol/water: N/A
pH.....: N/A	Specific Gravity (@20C).....: 1.047	Auto Ignition Temp.....: N/A
Melting Point.....: N/A	Vapor Pressure (mm Hg).....: 152	Decomposition Temp.....: N/A
Boiling Point.....: N/A	Vapor Density (Air=1).....: 0.83	Viscosity.....: N/A
Flash Point (F) TCC.....: N/A	Relative Density.....: N/A	

**Section 10. Stability and reactivity**

Special Remarks on Stability.: Stable

Special Remarks on Reactivity.: N/A

Water Reactive.: No

**Section 11. Toxicological Information**

Routes of Entry.: Inhalation, Skin Absorption, Ingestion

Animal Toxicity.: Formaldehyde: Acute Oral (LD50) 800 mg/kg (Rat) Acute Dermal (LD50) 0.27 gm/kg (Rabbit); Methanol: Acute Oral (LD50) 6.2-13.0 gm/kg (Rat); Gluteraldehyde: N/A; Cacodylic Acid: Acute Oral (LD50) 2600 mg.kg (Rat) Subcutaneous (LD50) 1250 mg/kg (Mouse)

Human Toxic Effects.: Target Organs: Eyes, Respiratory System, Kidneys, Heart, CNS, Liver,

Potential Acute Health Effects...: Hazardous in case of inhalation, eye contact, skin contact, ingestion

Potential Chronic Health Effects...: Formaldehyde: OSHA Carcinogen; IARC Code 3; NTP Code 2

**Section 12. Ecological Information**

Ecological Information.: N/A

**Section 13. Disposal Considerations**

Waste Disposal.: Dispose of in accordance with local, state and federal laws.

**Section 14. Transport Information**

DOT Identification.: Non Hazardous

**Section 15. Regulatory Information**

State Regulations.: New York release reporting list: Formaldehyde, Methanol, Cacodylic Acid

Component	CAS#	Sara Section 311 Reporting									
		Acute	Chronic	Fire	Pressure	Reactive	SARA302	SARA313	CERCLA	RCRA	
Cacodylic Acid	124-65-2	No	No	No	No	No	Yes	Yes	Yes	No	
Methanol	67-56-1	No	No	No	No	No	No	Yes	Yes	No	
Gluteraldehyde	111-30-8	No	No	No	No	No	No	No	No	No	
Formaldehyde	50-00-0	No	No	No	No	No	Yes	Yes	Yes	No	

**Section 16. Other Information**

Review Date : 3/15/2023

Reviewed by : Admin

MSDS Group Id.: 179

Notice: This SDS applies only to the material as packaged. If the material is altered by any means it may pose risks not mentioned here.

It is the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use.

While this SDS is based on reliable technical data, Poly Scientific R&D Corp. assumes no responsibility for the completeness or accuracy of the information contained herein.