

Safety Data Sheet


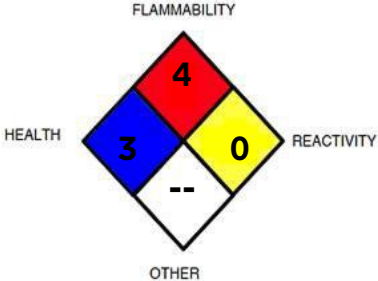
Section 1: Product & Company Identification

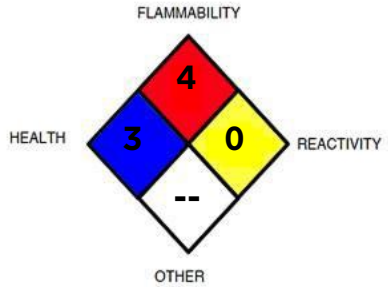
Product Name:	Formalin 10% Neutral Buffered Solution
Product #:	F-2467
Synonyms:	-
Supplier:	AG Scientific Holdings, LLC 9950 Scripps Lake Drive, Suite 104 San Diego CA 92131 Tele# + 858-452-9925
Emergency Tele#:	ChemTel, Tele# in USA 1-800-255-3924, International 1-813-248-0585

Section 2: Composition / Information on Ingredients

Component	CAS#	EC #	Composition
Water	7732-18-5	231-791-2	Q. S
Formaldehyde	50-00-0	200-001-8	≤ 4.0 g/L
Sodium Phosphate Dibasic	7558-79-4	231-448-7	6.5 g/L
Sodium Phosphate Monobasic	7558-80-7	231-449-2	4.0 g/L

Section 3: Hazards Identification

Symbols	
HMIS Classification	<p>FLAMMABILITY</p>  <p>HEALTH REACTIVITY</p> <p>OTHER</p>

NFPA Classification	
----------------------------	---

Section 4: First Aid Measures

General Overview:	Consult a doctor and show this safety data sheet.
Inhalation:	Remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen. If breathing stops, give artificial respiration. Consult a doctor.
Skin:	Immediately wash skin with copious amounts of soap and water for at least 15 minutes. Remove contaminated clothing and shoes and wash before reuse. Consult a doctor.
Eyes:	Flush with copious amounts of water for at least 15 minutes. Consult a doctor.
Ingestion:	Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Consult a doctor.
	See section 11 for more detailed information on health effects & symptoms.

SECTION 5: Fire Fighting Measures

Flammability of the product:	No data available
Extinguishing Media:	Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.
Hazardous thermal (de)composition products:	Formaldehyde Methanol Carbon monoxide (CO), Carbon dioxide (CO ₂)
Special Fire Fighting Procedures:	Wear suitable protective clothing to prevent contact with skin and eyes and self-contained breathing apparatus.
Flash Point:	No data available

Section 6: Accidental Release Measures




Personal Precautions:	Do not take action without suitable protective clothing - see section 8 of SDS. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid breathing vapors, mist, dust, or gas.
------------------------------	--


Environmental Precautions:	Do not let product enter drains.
Methods for Clean-up:	Cover spillage with suitable absorbent material. Using non-spark tools, sweep up material and place in an appropriate container. Decontaminate spill site with 10% caustic solution and ventilate area until after disposal is complete. Hold all material for appropriate disposal as described under section 13 of SDS.

SECTION 7: Handling & Storage

Storage:	Store in cool, well-ventilated area. Keep away from direct sunlight. Keep container tightly sealed until ready for use. Keep in a dry place. Store at 2-8°C.
Handling:	Use in a chemical fume hood, with air supplied by an independent system. Avoid inhalation, contact with eyes, skin, and clothing. Avoid the formation of dust and aerosols. Use in a well-ventilated area. Keep away from sources of ignition. Avoid prolonged or repeated exposure.

SECTION 8: Exposure controls / Personal Protection

Respiratory Protection:	 <p>Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.</p>
Skin and Body:	  <p>Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.</p> <p>Wear appropriate protective clothing. Complete suit protecting against chemicals, The type of protective equipment must be</p>

	selected according to the concentration and amount of the dangerous substance at the specific workplace.
Eyes:	 <p>Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).</p>
Ventilation/Engineering Measures:	Use in a fume hood where applicable. Ensure all engineering measures described under section 7 of SDS are in place. Ensure laboratory is equipped with a safety shower and eye wash station.
Hygiene:	Handle in accordance with good industrial hygiene and safety practice.
Other:	Do not let product enter drains.

SECTION 9: Physical and Chemical Properties

Appearance & Odor:	Clear and colorless solution
Formula	N/A
Molecular Wt.	N/A
Melting Pt.	No data available
Boiling Pt.	No data available
Density:	No data available
Vapor Pressure:	No data available
Evaporation Rate:	No data available
Vapor Density:	No data available
Solubility:	No data available
Flash Point:	No data available
Autoignition Temp:	No data available

SECTION 10: Stability and Reactivity

Stability:	Stable under recommended storage conditions.
Hazardous decomposition products:	Formaldehyde, Methanol, Carbon monoxide (CO), Carbon dioxide (CO ₂).
Materials to Avoid:	Strong oxidizing agents, Strong acids, Strong bases
Conditions to avoid:	Incompatible products. Heat, flames and sparks.

SECTION 11: Toxicological Information

RTECS#:	N/A
ACUTE Toxicity:	<p>Formaldehyde (CAS 50-00-0) LD50 Oral: 500 mg/kg (Rat) LD50 Dermal: 270 mg/kg (Rabbit) LD50 Inhalation: 0.578 mg/L (Rat) 4 h</p> <p>Sodium Phosphate Dibasic (CAS 7558-79-4) LD50 Oral: 17 g/kg (Rat) LD50 Dermal: Not listed LD50 Inhalation: Not listed</p> <p>Sodium Phosphate Monobasic (CAS 7558-80-7) LD50 Oral: 8290 mg/kg (Rat) LD50 Dermal: 7940 mg/kg (Rabbit) LD50 Inhalation: Not listed</p>
CHRONIC Toxicity:	Yes
Chronic Exposure: Carcinogen: Mutagen: Teratogen: Reproductive:	<p>IARC: Group 1 (Carcinogenic to Humans) AGGIH: A2 (Suspected Human Carcinogen) NTP: Known (Carcinogen) OSHA: Listed EPA: No classification on carcinogenic data is available from EPA</p>

SECTION 12: Ecological Information

Ecotoxicity:	<p>Formaldehyde (CAS 50-00-0) Freshwater Fish: <i>Leusiscus idus</i>: LC50 = 15 mg/L 96h Microtox: Not listed Water Flea: EC50 = 20 mg/L 96h, EC50 = 2 mg/L 48h</p>
Mobility:	<p>Formaldehyde (CAS 50-00-0) log Pow: -0.35</p>
Persistence and degradability:	No data available
Bioaccumulative potential:	No data available
Other adverse effects:	No data available
Corrosivity Characteristic:	No data available
General Notes:	To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

SECTION 13: Disposal Considerations

Residue Waste or Unused product:	<p>Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal 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.</p> <p>Formaldehyde (CAS 50-00-0) RCRA - U Series Wastes: U122</p>
Contaminated Packaging:	Treat as unused product.

SECTION 14: Transportation Information

UN ID#:	N/A
ADR / RID (LAND):	Not regulated
DOT regulations:	Not regulated
IMDG/IMO (SEA):	Not regulated
IATA/DGR (AIR):	Not regulated
Special Provisions:	N/A

SECTION 15: Regulatory Information

Health Phrases:	<p>H315 Skin corrosion/irritation Category 2 H317 Skin Sensitisation Category 1 H318 Serious eye damage Category 1 H350 Carcinogenicity Category 1A H370 Specific target organ toxicity - single exposure Category 1 H371 Specific target organ toxicity - single exposure Category 2 H373 Specific target organ toxicity, repeated exposure Category 2</p>
Risk Phrases:	
Safety Phrases:	<p>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/vapors/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/ protective clothing/ eye protection/ face protection. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present</p>

	<p>and easy to do. Continue rinsing. P308 + P311 IF exposed or concerned: call a POISON CENTER or doctor/physician P314 Get medical advice/attention if you feel unwell. P321 Specific treatment (see. on this label). P333 + P313 If skin irritation or rash occurs: Get medical advice/attention. P362 + P364 Take off contaminated clothing and wash before reuse. P405 Store locked up. P501 Dispose of contents/ container to an approved waste disposal plant</p>
EU Regulations:	N/A
US Regulations:	<p>TSCA: Water (CAS 7732-18-5), Formaldehyde (CAS 50-00-0), Sodium Phosphate Dibasic (CAS 7558-79-4), Sodium Phosphate Monobasic (CAS 7558-80-7)</p> <p>California Proposition 65: Formaldehyde (CAS 50-00-0) 40 µg/day</p> <p>Massachusetts State Right to Know: Formaldehyde (CAS 50-00-0) New Jersey State Right to Know: Formaldehyde (CAS 50-00-0) Pennsylvania State Right to Know: Formaldehyde (CAS 50-00-0) Illinois State Right to Know: Formaldehyde (CAS 50-00-0) Rhode Island State Right to Know: Formaldehyde (CAS 50-00-0) U.S. Department of Homeland Security: Formaldehyde (11250 lb STQ solution), Sodium Phosphate Monobasic (2000 lb STQ)</p>
U.S. Federal Regulations:	<p>SARA 311/312 MSDS distribution-chemical inventory-hazard identification: Acute hazard (Yes), Chronic Hazard (Yes)</p> <p>SARA 313 toxic chemicals notification and release reporting: Formaldehyde (CAS 50-00-0), Weight 3.7%, Threshold Value 0.1%</p> <p>Clean Water Act Formaldehyde (CAS 50-00-0), 100 lb Sodium Phosphate Dibasic (CAS 7558-79-4), 5000 lb</p> <p>Clean Air Act Formaldehyde (CAS 50-00-0), HAPS Listed</p> <p>OSHA: Formaldehyde (CAS 50-00-0), 2 ppm STEL 0.5 ppm Action Level 0.75 ppm TWA, TQ: 1000 lb</p>
WHMIS (Canada):	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

SECTION 16: Other Information



LIABILITY STATEMENT: *The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. AG Scientific shall not be held liable for any damages resulting from handling or from contact with the above product. AG Scientific products are for research purposes only. Not for human use or consumption.*