

Section 1: Identification

Product Name: Firmoyl® 25

Product Code: PW0106400

Recommended Use: Arterial Embalming Fluid – Emulsion // 25 Index oil based arterial fluid with a radiant color and controlled firming.

Restrictions on Use: Professional embalmer use only; not for general consumer use.

Manufacturer: TNPC, LLC – Dallas, TX 75236

Distributed by: Pierce Companies – 4722 Bronze Way – Dallas, TX 75236 – (214) 333-4230

Emergency Phone Number: CHEMTREC – (800) 424-9300

Section 2: Hazard(s) Identification

GHS Classification:

- Flammable Liquid — Category 3
- Acute Toxicity (Oral) — Category 4
- Acute Toxicity (Dermal) — Category 4
- Acute Toxicity (Inhalation, Vapors) — Category 3
- Skin Irritation — Category 2
- Eye Irritation — Category 2A
- Skin Sensitization — Category 1
- Germ Cell Mutagenicity — Category 2
- Carcinogenicity — Category 1B
- Specific Target Organ Toxicity (Single Exposure) — Category 1
- Specific Target Organ Toxicity (Single Exposure) — Category 3 (Respiratory irritation)

Signal Word: **DANGER**

Hazard Statements:

- H226: Flammable liquid and vapor.
- H302: Harmful if swallowed.
- H312: Harmful in contact with skin.
- H331: Toxic if inhaled.
- H315: Causes skin irritation.
- H317: May cause an allergic skin reaction.
- H319: Causes serious eye irritation.
- H335: May cause respiratory irritation.
- H341: Suspected of causing genetic defects.
- H350: May cause cancer.
- H370: Causes damage to organs.

Precautionary Statements:

- P201: Obtain special instructions before use.
- P202: Do not handle until all safety precautions have been read and understood.
- P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P233: Keep container tightly closed.
- P240: Ground and bond container and receiving equipment.
- P241: Use explosion-proof electrical, ventilating, and lighting equipment.
- P242: Use non-sparking tools.
- P243: Take action to prevent static discharges.
- P260: Do not breathe mist, vapors, or spray.
- P264: Wash thoroughly after handling.
- P270: Do not eat, drink, or smoke when using this product.
- P271: Use only outdoors or in a well-ventilated area.
- P272: Contaminated work clothing must not be allowed out of the workplace.
- P280: Wear protective gloves, protective clothing, eye protection, and face protection.

- P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
- P302+P352: IF ON SKIN: Wash with plenty of water.
- P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P308+P311: IF exposed or concerned: Call a POISON CENTER or doctor.
- P333+P313: If skin irritation or rash occurs: Get medical advice or attention.
- P337+P313: If eye irritation persists: Get medical advice or attention.
- P362+P364: Take off contaminated clothing and wash it before reuse.
- P370+P378: In case of fire: Use dry chemical, alcohol-resistant foam, or carbon dioxide to extinguish.
- 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 and container in accordance with regulations.

Pictograms:



Section 3: Composition/Information on Ingredients

CHEMICAL NAME	CAS NUMBER	% WEIGHT	CLASSIFICATION	Trade Secret Information: Exact % of concentration is withheld to protect Trade Secret Information. Ranges are given in accordance with 29 CFR 1910.1200(i), Appendix E
Formaldehyde	50-00-0	19-29%	Flam. Liq. 3; Acute Tox. 4 (O); Acute Tox. 3 (D/Inh); Skin Irrit. 2; Eye Irrit. 2; Skin Sens. 1; Muta. 2; Carc. 1B; STOT SE 3	
Methanol	67-56-1	18-28%	Flam. Liq. 2; Acute Tox. 3 (O/D/Inh); STOT SE 1	
Other non-hazardous components	—	47-57%	not classified under GHS	

Section 4: First-Aid Measures

- **Inhalation:** Move to fresh air immediately. Keep at rest. If breathing is difficult, get medical attention immediately.
- **Skin/Eye Contact:** Remove contaminated clothing. Wash skin with soap and water. Rinse eyes with water for several minutes. Remove contact lenses if present and easy to do. Get medical attention if irritation persists.
- **Ingestion:** Call a poison center or doctor immediately. Rinse mouth. Do not induce vomiting unless directed by medical personnel.
- **Symptoms/Effects:** Toxic if swallowed, on skin, or if inhaled. Causes skin and eye irritation. May cause allergic skin reaction. May cause respiratory irritation. May affect the central nervous system and optic nerve. May cause cancer.
- **Physician Notes:** Treat symptomatically. Monitor for respiratory irritation, CNS effects, visual symptoms, and methanol toxicity.

Section 5: Fire-fighting Measures

- **Suitable Extinguishing Media:** Dry chemical, alcohol-resistant foam, or carbon dioxide.
- **Unsuitable Extinguishing Media:** Do not use a direct water stream.
- **Specific Hazards:** Flammable liquid and vapor. Vapors may form explosive mixtures with air. Heating may produce toxic fumes.
- **Special Protective Equipment & Precautions for Firefighters:** Wear self-contained breathing apparatus and full protective gear. Cool exposed containers with water spray.

Section 6: Accidental Release Measures

- **Personal Precautions:** Avoid breathing vapors. Avoid skin and eye contact. Remove ignition sources. Wear proper PPE.
- **Emergency Procedures:** Ventilate area. Isolate spill. Keep unnecessary personnel away.
- **Methods and Materials for Containment:** Contain with sand, earth, or other inert absorbent. Prevent entry into drains or waterways.

- **Cleanup Procedures:** Absorb spill, place in proper container, and dispose of in accordance with regulations. Wash spill area after cleanup.

Section 7: Handling and Storage

- **Safe Handling:** Avoid breathing vapors, mist, or spray. Avoid contact with skin, eyes, and clothing. Use only with adequate ventilation. Keep away from heat, sparks, and open flame.
- **Hygiene Measures:** Wash thoroughly after handling. Do not eat, drink, or smoke when using this product. Remove contaminated clothing and wash before reuse.
- **Safe Storage:** Store in a cool, well-ventilated area. Keep container tightly closed. Store locked up.
- **Incompatibilities:** Strong oxidizers, strong acids, strong bases, and ignition sources.

Section 8: Exposure Controls/Personal Protection

- **Engineering Controls:** Use local exhaust or general ventilation to keep vapor levels below exposure limits. Emergency eyewash and safety shower should be available.
- **Personal Protective Equipment (PPE):**
 - **Gloves:** Chemical-resistant gloves.
 - **Eye/Face Protection:** Safety goggles or face shield.
 - **Respiratory Protection:** Use NIOSH-approved respiratory protection if ventilation is inadequate.
- **Skin/Body:** Chemical-resistant protective clothing.
- **Exposure Limits Table:**

Component	OSHA PEL	ACGIH TLV	NIOSH REL
Formaldehyde (50-00-0)	0.75 ppm TWA; 2 ppm STEL	0.1 ppm TWA; 0.3 ppm STEL	0.016 ppm TWA; 0.1 ppm ceiling
Methanol (67-56-1)	200 ppm TWA	200 ppm TWA; 250 ppm STEL	200 ppm TWA; 250 ppm STEL

Section 9: Physical and Chemical Properties

- **Appearance (physical state, color, etc.):** Liquid; Milky Pink solution
- **Odor:** Pungent
- **Odor Threshold:** Low ppm range
- **pH:** 6.20
- **Melting Point/Freezing Point:** Below 32°F
- **Initial Boiling Point/Boiling Range:** 204.8°F
- **Flash Point:** 126°F
- **Evaporation Rate:** <1
- **Flammability (solid, gas):** Not applicable
- **Upper/Lower Flammability or Explosive Limits:** LEL 6%; UEL 73%
- **Vapor Pressure:** 28 mm Hg @ 71°F
- **Vapor Density:** 1.00
- **Relative Density/Specific Gravity:** 1.0551 g/mL
- **Solubility(ies):** Soluble
- **Partition Coefficient (n-octanol/water):** Not determined for mixture
- **Auto-ignition Temperature:** Elevated; expected above 700°F
- **Decomposition Temperature:** Decomposes gradually with heat
- **Viscosity:** Low viscosity liquid

Section 10: Stability and Reactivity

- **Reactivity:** Reactive with strong oxidizers. May react with strong acids, strong bases, and other incompatible materials.
- **Chemical Stability:** Stable under normal storage and handling conditions. Keep container tightly closed. Product remains a liquid under normal conditions; heat, contamination, or prolonged storage may increase vapor generation and may affect color or clarity over time.
- **Hazardous Reactions:** Hazardous polymerization is not expected under normal conditions.
- **Conditions to be Avoided:** Heat, sparks, open flame, hot surfaces, and poor ventilation. Avoid excessive heat and contamination.
- **Incompatible Materials:** Strong oxidizers, strong acids, strong alkalis, and strong reducing agents.
- **Hazardous Decomposition:** Carbon oxides, formaldehyde, and other irritating or toxic fumes may form during fire or thermal decomposition.

Section 11: Toxicological Information

- **Likely Routes of Exposure:** Inhalation, skin contact, eye contact, and ingestion.
- **Chronic Effects:** Repeated or prolonged exposure may affect the respiratory system, central nervous system, and optic nerve. Prolonged exposure to formaldehyde is associated with cancer hazard. Repeated skin contact may lead to sensitization.
- **Acute Toxicity (LD50 & LC50):**
 - **Formaldehyde:** Oral LD50 (rat) 500 mg/kg; Dermal LD50 (rabbit) 270 mg/kg; Inhalation LC50 (rat, 4 hr) 0.578 mg/L.
 - **Methanol:** Oral LD50 (rat) 1187–2769 mg/kg; Dermal LD50 (rabbit) 17,100 mg/kg; Inhalation LC50 (rat, 4 hr) 128.2 mg/L.
- **Symptoms/Effect:** Toxic if swallowed, on skin, or if inhaled. Causes skin and eye irritation. May cause allergic skin reaction. May irritate the respiratory tract. Severe exposure may cause headache, dizziness, nausea, visual disturbance, CNS depression, and organ damage.
- **Regulatory Listings:**
 - **NTP:** Formaldehyde — Listed as known to be a human carcinogen.
 - **IARC:** Formaldehyde — Group 1.
 - **OSHA:** Formaldehyde — Regulated carcinogen.

Section 12: Ecological Information

- **Ecotoxicity:** This product is expected to be harmful to aquatic life if released in significant quantities. The main ecological concern is from the formaldehyde and methanol content.
- **Persistence/Degradability:** Methanol is readily biodegradable. Formaldehyde is expected to degrade in air, water, and soil and is not expected to persist for long periods under normal environmental conditions.
- **Bioaccumulation Potential:** Low bioaccumulation potential is expected. Methanol: log Kow -0.77. Formaldehyde: log Kow 0.35. Available data indicate low BCF tendency.
- **Mobility in Soil:** High mobility in soil is expected for the soluble components. Both methanol and formaldehyde are reported as having very high mobility in soil.
- **Other Adverse Effects:** Prevent release to drains, surface water, and soil. Large releases may create localized toxic effects and oxygen demand in water.

Section 13: Disposal Considerations

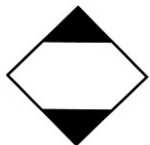
- Dispose of in accordance with federal, state, and local regulations.
- Empty containers must not be reused or recycled. Dispose of bottles and residual product in accordance with regulations.
- **Recommended Methods:** Incineration or chemical waste landfill.

Section 14: Transport Information

DOT (Ground Transport): Not regulated

Notes: Limited Quantity: YES (Permitted for small packaging)

Labels: Limited Quantity



IMDG (Ocean Transport):

UN#: UN1198

UN Proper Shipping Name: Formaldehyde solutions, flammable

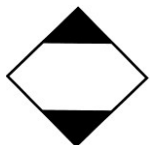
Transport Hazard Classes: 3

Packing Group Number: III

Environmental Hazards: Marine Pollutant: No

Notes: Limited Quantity: YES (Permitted for small packaging)

Labels: Limited Quantity; Flammable Liquid (Class 3); Corrosive (8)



IATA (Air Transport):

UN#: UN1198

UN Proper Shipping Name: Formaldehyde solutions, flammable

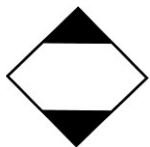
Transport Hazard Classes: 3

Packing Group Number: III

Environmental Hazards: Marine Pollutant: No

Notes: Limited Quantity: YES (Permitted for small packaging)

Labels: Limited Quantity; Flammable Liquid (Class 3); Corrosive (8)



Section 15: Regulatory Information

TSCA List: Formaldehyde and methanol are existing U.S. chemical substances subject to TSCA requirements.

EPCRA – Emergency Planning & Community Right-to-Know: Formaldehyde is an EPCRA Extremely Hazardous Substance. Release reporting obligations may apply if reportable quantities are exceeded.

CERCLA Reportable Quantity: Formaldehyde — 100 lb.

SARA 302: Formaldehyde is listed. **Threshold Planning Quantity (TPQ):** 500 lb.

SARA 304 Extremely Hazardous Substances Reportable Quantity: Formaldehyde — 100 lb.

SARA 311/312: Fire hazard; acute health hazard; chronic health hazard.

SARA 313: Formaldehyde and methanol are listed toxic chemicals.

California Prop 65: This product can expose users to formaldehyde, known to the State of California to cause cancer, and methanol, known to the State of California to cause reproductive toxicity.

US State Regulations: Formaldehyde and methanol are listed under state right-to-know programs, including New Jersey Right to Know, Pennsylvania Worker and Community Right-to-Know, and Massachusetts Right to Know / TURA-related reporting frameworks.

Other Regulations: Formaldehyde is subject to OSHA's formaldehyde standard, 29 CFR 1910.1048.

Section 16: Other Information

Regulatory Compliance Verification:

This Safety Data Sheet has been prepared in accordance with and verified for compliance with:

- OSHA Hazard Communication Standard (29 CFR 1910.1200, HazCom 2023)
- Globally Harmonized System (GHS) Revision 11
- U.S. TSCA, EPCRA, CERCLA
- California Proposition 65
- Canadian WHMIS 2022 (GHS-aligned)
- EU REACH Regulation

All hazard classifications, labeling elements, and regulatory disclosures are based solely on the specific formula composition and chemical properties provided for this product.

Hazardous Material Information System III (USA)

Health:	3
Flammability:	2
Physical Hazards:	0
Personal Protection:	B

National Fire Protection Association (USA)

Health:	3
Flammability:	2
Instability:	0
Special:	-

HMIS ratings are based on a 0-4 scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS ratings are not required on Safety Data Sheets under 29 CFT 1910.1200, the preparer may choose to provide them. HMIS ratings are to be used with a fully implemented HMIS program. HMIS is a registered mark of the National Paint & Coatings Association (NPCA).

Prepared by:	Pierce Companies Regulatory Department
Date of Preparation/Revision:	May 01, 2026
Supersedes:	July 01, 2024

Notice: The information in this SDS is believed to be accurate and reliable at the time of preparation, but no guarantee is made that it is complete or that the hazards listed are the only hazards present. Users are responsible for determining the suitability of the product for their intended use, complying with all applicable laws and safety requirements, and considering the effects of use with other materials. Pierce makes no express or implied warranty regarding the product, its merchantability, fitness for a particular purpose, or the accuracy of this information, except that the product will conform to Pierce's specifications. Possession of this SDS does not indicate that the holder purchased or used the product.