P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 – Tel. (435) 755-9848 - Fax (435) 755-0015 - www.scytek.com

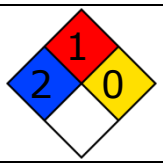
Section 1. Identification of the Substance/Mixture and the Company

1.1 Product Identifier	Product Name: Zinc Formalin Solution Product Number: ZFN
1.2 Intended use	EN: Laboratory reagent. For professional use only. DA: Laboratoriereagens. Kun til professionelt brug. DE: Laboratoriumreagens. Alleen voor professioneel gebruik. EL: Αντιδραστήριο εργαστηρίου. Για επαγγελματική χρήση μόνο. ES: Reactivo de laboratorio. Sólo para uso profesional. FR: Réactif de laboratoire. Pour un usage professionnel uniquement. IT: Laboratorio di reagente. Solo per uso professionale. NL: Laboratoriumreagens. Alleen voor professioneel gebruik. PT: Reagente de laboratório. Para uso profissional. SV: Laboratoriereagens. Endast för yrkesmässig användning.
1.3 Details of the supplier of the safety data sheet	**Manufacturer**: ScyTek Laboratories, Inc. **Address**: 205 South 600 West Logan, Utah 84321 U.S.A. **Phone Number**: 800-729-8350 **Fax Number**: 435-755-0015 **e-mail**: scytek@scytek.com **Website**: scytek.com
1.4 Emergency Telephone	Chemtrec (USA): 1-800-424-9300

Section 2. Hazards Identification

2.1 GHS Classification	Skin irritation (Category 2) – H315 Serious eye damage (Category 1) H318 Skin sensitization (Category 1) – H317 Carcinogenicity (Category 2) – H351 Specific target organ toxicity (Category 2) – H371 Germ Cell Mutagenicity (Category 1B) – H340
2.2 Label Elements	Pictogram(s):  Signal word: Danger Hazard statement(s): H318 – Causes serious eye damage H351 – Suspected of causing cancer H371 – May cause damage to organs H340 – May cause genetic defects H317 – May Cause an allergic skin reaction H315 – Causes skin irritation

P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 – Tel. (435) 755-9848 - Fax (435) 755-0015 - www.scytek.com

	Precautionary statement(s): P201: Obtain special instructions before use. P202: Do not handle until all safety precautions [on SDS] have been read and understood. P260: Do not breathe dust/fumes/gas/mist/vapours/spray. Precautionary statement(s) not listed on label: P301 + P315 - IF SWALLOWED: Get immediate medical advice/attention P280 – Wear protective gloves/protective clothing/eyeprotection/faceprotection P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P333 + P313 – If skin irritation or rash occurs: Get medical advice/attention. P403 + P235 – Store in a well-ventilated place. Keep container tightly closed. See Annex III and IV of the EU CLP regulation for translations of statements.
NFPA Scale: 0-4 (Estimated for Mixtures)	
HMIS (U.S.A.) Scale: 0-4 (Estimated for Mixtures)	HEALTH **2** FLAMMABILITY **1** PHYSICAL HAZARD **0** PERSONAL PROTECTION **H**
2.3 Other Hazards	**PBT:** This mixture does not contain any substances that are assessed to be a PBT. **vPvB:** This mixture does not contain any substances that are assessed to be a vPvB.

Section 3. Composition and Information on Ingredients

3.2 Chemical Description: Mixture

*May contain additional non-hazardous proprietary ingredients.

*May contain additional active ingredients at concentrations <0.1%w/v.

Hazardous Ingredients:	CAS#	EC#	GHS Symbols	%
Formalin (~37% Formaldehyde)	50-00-0	200-001-8	 Warning. 2 H315 Causes skin irritation.  Warning. 1. H400 Very toxic to aquatic life . 1. H410 Very toxic to aquatic life with long lasting effects.	≤ 10
Zinc Chloride	7646-85-7	231-592-0	 Warning. 4 H302 Harmful if swallowed.  Danger. 1B. H314 Causes severe skin burns and eye damage.	≤ 5

P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 – Tel. (435) 755-9848 - Fax (435) 755-0015 - www.scytek.com

			 Warning. 1. H410 Very toxic to aquatic life with long lasting effects.	
Sodium Acetate, Anhydrous	127-09-3	204-823-8	N/A	≤ 1
Methanol	67-56-1	200-659-6	 Danger. 3 H225 Highly flammable liquid and vapour.  Danger. 3. H301 Toxic if swallowed. 3 H311 Toxic in contact with skin. 3 H331 Toxic if inhaled.  Danger. 1 H370 Causes damage to organs.	≤ 1
Acetic Acid	64-19-7	200-580-7	 Warning. 3, H226 Flammable liquid and vapour.  Danger. 1A H314 Causes severe skin burns and eye damage.	≤ 0.1

Section 4. First Aid Measures

4.1 Description of first aid measures

Eye Contact: Check for and remove contact lenses. Immediately flush eyes with copious amounts of water and get immediate medical attention.

Skin Contact: Remove contaminated clothing and wash contact area with mild soap and copious amounts of water. Get medical attention if irritation develops.

Inhalation: If inhaled, remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms worsen.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as collar, tie, belt or waistband. Get immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed

See section 2.2 and 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

Section 5. Fire Fighting Measures

5.1 Extinguishing Media	Extinguish fire using water spray, carbon dioxide, chemical foam, or dry chemical.
5.2 Special hazards arising from the substance or mixture	Emits toxic vapors under fire conditions.
5.3 Advice for firefighters	As with any fire, wear personal protection equipment, including a self-contained breathing apparatus (S.C.B.A.)

Section 6. Accidental Release Measures

P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 – Tel. (435) 755-9848 - Fax (435) 755-0015 - www.scytek.com

6.1 Personal precautions, protective equipment and emergency procedures
Wear chemical resistant clothing, gloves, and eye protection. Wear NIOSH/MSHA approved breathing apparatus.
6.2 Environmental precautions
Keep material away from heat, flame, ignition sources, and reactive materials. Don't allow product to enter drain.
6.3 Methods and materials for containment and cleaning up
Wipe up or absorb spill using inert absorbent and place in a suitable waste container for disposal.

Section 7. Handling and Storage

7.1 Precautions for safe handling.
Avoid contact with skin and eyes.
Wash thoroughly after handling.
Avoid breathing vapor.
7.2 Conditions for safe storage, including any incompatibilities.
Store in well ventilated area.
Keep container tightly closed.
Store at 15-30°C.
7.3 Specific end use(s).
See section 1.2

Section 8. Exposure Controls / Personal Protection

8.1 Control parameters	**Exposure Limits:** *Formaldehyde ;* **NIOSH REL**: Ca TWA 0.016 ppm C 0.1 ppm **OSHA PEL**: [1910.1048] TWA 0.75 ppm ST 2 ppm **ACGIH TLV:** 0.3 ppm C *Methanol:* **NIOSH REL**: TWA 200 ppm (260 mg/m^3) ST 250 ppm (325 mg/m^3) [skin] **OSHA PEL**: TWA 200 ppm (260 mg/m^3) **ACGIH TLV:** TWA 200 ppm (262 mg/m^3) STEL 250 ppm (328 mg/m^3) *Acetic acid, glacial:* **ACGIH TLV**: 15ppm (37 mg/m3) STEL 10 ppm (25 mg/m3) TWA **NIOSH REL**: 15 ppm (37 mg/m3) STEL 10 ppm (25 mg/m3) TWA **OSHA PEL**: 10 ppm (25 mg/m3) TWA
8.2 Exposure controls	**Personal Protective Equipment (PPE):** **Eye/Face protection.** Safety glasses or goggles are required. **Skin protection.** Protective clothing is required. **Hand protection.** Chemical resistant gloves are required. Glove material must be resistant to the components of this product. Consult glove manufacturer for specific recommendations of appropriate material and thickness of glove. **Respiratory protection.** Avoid breathing vapor. **Environmental exposure controls.** Avoid releasing large quantities into the environment. No additional information.
Engineering Controls	Working area should be adequately large and well ventilated to prevent concentration of vapors.

P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 – Tel. (435) 755-9848 - Fax (435) 755-0015 - www.scytek.com

	Provide mechanical exhaust ventilation or other engineering controls to keep airborne concentrations of vapors below their respective threshold limits.

Section 9. Physical and Chemical Properties

Physical State	Liquid
Color	Clear colorless
Odor	Formaldehyde odor
Odor Threshold	Unknown
pH	5.2
Melting Point/ Freezing Point	Unknown
Initial Boiling Point	Unknown
Flash Point	Unknown
Evaporation Rate	Unknown
Flammability (solid, gas)	Unknown
Upper/Lower Flammability Limits	Unknown
Vapor Pressure	Unknown
Vapor Density	Unknown
Relative Density	Unknown
Solubility(ies)	Water
Partition Coefficient: n-octanol/water	Unknown
Auto-Ignition Temperature	Unknown
Decomposition Temperature	Unknown
Viscosity	Unknown
Explosive Properties	Not explosive.
Oxidizing Properties	Unknown

Section 10. Stability and Reactivity

10.1 Reactivity	No relevant data available.
10.2 Chemical Stability	Stable under normal temperatures and pressures.
10.3 Possibility of Hazardous Reactions	No hazardous reactions known.
10.4 Conditions to Avoid	Fire, static electricity, direct sunlight.
10.5 Incompatible Materials	Strong oxidants, ammonia, chlorine bleach or hydrochloric acid. Mixing with phosphate solutions leads to precipitation of the zinc.
10.6 Hazardous Decomposition Materials	Carbon monoxide, carbon dioxide.

Section 11. Toxicological Information

11.1 Information on Toxicological Effects.	**Acute Toxicity** Formaldehyde: **NIOSH REL**: Ca TWA 0.016 ppm C 0.1 ppm **OSHA PEL**: [1910.1048] TWA 0.75 ppm ST 2 ppm **ACGIH TLV:** 0.3 ppm C

P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 – Tel. (435) 755-9848 - Fax (435) 755-0015 - www.scytek.com

	Methanol: **NIOSH REL**: TWA 200 ppm (260 mg/m^3) ST 250 ppm (325 mg/m^3) [skin] **OSHA PEL**: TWA 200 ppm (260 mg/m^3) **ACGIH TLV:** TWA 200 ppm (262 mg/m^3) STEL 250 ppm (328 mg/m^3)
Carcinogenicity.	**International Agency for Research on Cancer (IARC).** Formaldehyde is listed as a known human carcinogen. **National Toxicology Program (NTP).** Formaldehyde is listed as "Known to be a human carcinogen" in the Thirteenth Report.

Section 12. Ecological Information

12.1 Toxicity	**Fish:** No relevant studies identified. **Crustacea:** No relevant studies identified. **Algae/Aquatic Plants:** No relevant studies identified. **Other Organisms:** No relevant studies identified.
12.2 Persistence and Degradability.	No relevant studies identified.
12.3 Bioaccumulative Potential.	No relevant studies identified.
12.4 Mobility in Soil.	Miscible in water. May spread in water systems. This component is non-volatile.
Additional Remarks	None.
12.5 Results of PBT and vPvB Assessment.	**PBT:** This mixture does not contain any substances that are assessed to be a PBT. **vPvB:** This mixture does not contain any substances that are assessed to be a vPvB.

Section 13. Disposal Considerations

13.1 Waste Disposal Methods.	Sewage disposal is discouraged. Waste should not be disposed of by release to sewers. Dispose waste in accordance with federal, state and local environmental control regulations.
Product/Packaging Disposal.	Final decisions on the appropriate waste management method must be in line with local, regional and national regulations.
Other Disposal Recommendations.	No relevant data available.

Section 14. Transport Information – DOT IATA, IMDG, ADR, etc.

14.1 UN Number	Not dangerous goods
14.2 UN Proper Shipping Name	Not dangerous goods
14.3 Transport Hazard Class(es)	Not dangerous goods
14.4 Packing Group	Not dangerous goods
14.5 Environmental Hazards	**Marine Pollutant:** No
14.6 Special Precautions for User	Not applicable.

Section 15. Regulatory Information

P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 – Tel. (435) 755-9848 - Fax (435) 755-0015 - www.scytek.com

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture.	
Extremely Hazardous Substances; Section 355	None of the components in this mixture are listed.
Toxic Substances Control Act; TSCA	All of the components in this mixture are listed.
California Proposition 65	Methanol is listed as a having developmental toxicity.
Right To Know Components	***Formaldehyde*** Massachusetts Pennsylvania New Jersey ***Zinc Chloride*** Massachusetts Pennsylvania New Jersey ***Sodium Acetate, Anhydrous*** Pennsylvania New Jersey ***Methanol*** Massachusetts Pennsylvania New Jersey ***Acetic Acid*** Massachusetts Pennsylvania New Jersey

Section 16. Other Information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. ScyTek Laboratories shall not be held liable for any damage resulting from handling or from contact with the above product.