SAFETY DATA SHEET:

Stemgent AP Staining Kit II Fix Solution

1. IDENTIFICATION

1.1. Product Name	Stemgent® Alkaline Phosphatase Staining Kit II Fix Solution
1.2. Catalog Number	09-0042
1.3. Uses and restrictions	For research use only. Not for use in therapeutic or diagnostic applications
1.4. Manufacturer/Supplier	REPROCELL USA, Inc. 9000 Virginia Manor Road, Suite 207 Beltsville, MD 20705 USA
1.5. In Case of Emergency	• For medical emergencies, contact your local emergency center. • For transportation emergencies, contact your local transportation authorities. • For other non-medical or environmental emergencies please call (617) 245-0030, 8:00 am-4:00 pm EST, Monday – Friday.

2. HAZARDS IDENTIFICATION

2.1. GHS Classification according to Annex II

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

- Flammable liquids (Category 4), H227
- Acute toxicity, Oral (Category 4), H302
- Skin irritation (Category 2), H315
- Serious eye damage (Category 1), H318
- Skin sensitization (Category 1), H317
- Carcinogenicity (Category 1A), H350
- Specific target organ toxicity – single exposure (Category 1), H370

2.2. Signal Word: Danger

2.3. Symbol



2.4. Hazard Statement(s)

- H227: Combustible Liquid
- H302: Harmful if swallowed
- H315: Causes skin irritation
- H315: May cause an allergic skin reaction
- H318: Causes serious eye damage
- H341: Suspected of causing genetic defects
- H350: May cause cancer
- H370: Causes damage to organs

2.5. Precautionary Statement(s)

- P201: Obtain special instructions before use
- P202: Do not handle until all safety precautions have been read and understood.
- P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking

- P260: Do not breateh dust/fumes/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 workplace
- P280: Wear protective gloves/protective clothing/eye protection/face protection
- P301+P312+P220: IF SWALLOWED: Call a Poison Center or doctor/physician if you feel unwell. Rince Mouth
- P302+P352: IF ON SKIN: Wash with plenty of soap and water
- P305+P351+P338+P310: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Immediately contact a Poison Center or doctor/physician
- P333+P313: If skin irritation or rash occurs: Get medical attention or advice
- P362: Remove contaminated clothing and wash before reuse
- P370+P378: In case of fire: Use dry-sand, dry chemical, or alcohol-resistant foam for extinction
- P403+P235: Store in a well-ventilated area. Keep cool.
- P405: Store locked up
- P501: Dispose of contents/container to and approved waste disposal plan.

2.6. Hazards not otherwise classified (HNOC) or not covered by GHS: None

3. COMPOSITION/INFORMATION OR INGREDIENTS

3.1 Chemical Name	3.2 Synonyms	3.3 Chemical Formula	3.4 Molecular Weight	3.5 CAS Number
Formaldehyde	Formalin	CH_2O	30.031 g/mol	50-00-0
Methanol	Methyl Alcohol	CH_4O	32.04 g/mol	67-56-1

HAZARDOUS COMPONENTS IN MIXTURE

Component	CAS-N-/ EC No	Classification	Concentration
Formaldehyde	50-00-0 / 200-001-8	Flam Liquid 4: H227 Acute Tox 3: H301+H311+H331 Skin Corr 1B: H314 Eye Damage 1: H314, H318 Skin Sens 1: H351 Carcinogenic 2: H351 Aquatic A3: H402	1-5%
Methanol	67-56-1 / 200-659-6	Flam Liquid 2: H225 Acute Tox 3: H301+H311+H331 STOT SE 1: H370	1-5%

4. FIRST AID MEASURES

4.1. First Aid Instructions

- **General Advice**: Move out of exposure area. Consult a physician.
- **Eyes**: Check for and remove contact lenses immediately and flush thoroughly with water for at least 15 minutes. Call a physician.
- **Skin**: Immediately flush skin with copious amounts of water. Remove contaminated clothing and shoes and wash before reuse. Contact a physician.

- **Ingestion**: If swallowed, wash mouth out with water provided person is conscious. Do not induce vomiting, Loosen tight clothing. Contact a physician.
- **Inhalation**: If inhaled, remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, call a physician.
- **Puncture wounds**: Wash thoroughly with soap and water. Allow wound to bleed freely. Contact a physician.

4.2 Most important symptoms/effects, acute and immediate	Described in section 2
4.3 Indication of immediate medical attention and special treatment needed	No data available

5. FIRE FIGHTING MEASURES

5.1 Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.
5.2 Specific hazards arising from the product	Carbon oxides
5.3 Special protective equipment and precautions for firefighters	Wear self-contained breathing apparatus and full turnout gear for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment, and emergency procedures	Use personal protective equipment (see section 8). Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Remove all sources of ignition. Beware of vapors to form explosive concentrations. Vapors can accumulate in low areas.
6.2 Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
6.6 Methods and materials for containment and clean up	Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

- Avoid inhalation, contact with eyes, skin, and clothing.
- Keep in well-ventilated area
- Keep away from sources of ignition – No smoking.
- For other precautions see section 2.5.

7.2. Conditions for safe storage, including any incompatibilities

Store at 4 °C. Keep containers tightly closed in a dry and well-ventilated place. Containers which have been opened must be carefully resealed and kept upright to prevent leakage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Formaldehyde, CAS No. 50-00-0

- This stand applies to all occupational exposures to formaldehyde from formaldehyde, its solutions, and materials that release formaldehyde.
- Potential occupation carcinogen; OSHA specifically regulated carcinogen

Upper respiratory tract irritation, eye irritation, sensitizer
Formaldehyde Exposure Limits

- TWA: 0.016ppm – USA NIOSH Recommended Exposure Limits
- Ceiling Limit: 0.3ppm – USA ACGIH Threshold Limit Values
  0.1ppm – USA NIOSH Recommended Exposure Limits
- PEL: 0.75 ppm, 15 minute ceiling value – OSHA Specifically Regulated Chemicals/Carcinogens
  Methanol, CAS No. 67-56-1
- Potential for dermal/cutaneous absorption
- Headache, Nausea, Dizziness, Eye Damage
  Methanol Exposure Limits
- BEI: 15 mg/l (Urine biological specimen) – ACGIH Biological Exposure Limit
- STEL: 250ppm – USA ACGIH Threshold Limit Values
- ST: 250ppm; 260 mg/m3 – USA NIOSH Recommended Exposure Limits
- TWA: 200ppm – USA ACGIH Threshold Limit Values
  200ppm; 260 mg/m3 – USA Occupational Exposure Limits OSHA Table Z-1 Limits for air contaminants/USA NIOSH Exposure Recommended Limits

8.2 Appropriate engineering controls	Safety shower and eye bath. Mechanical exhaust required.
8.3 Protection measures and personal protective equipment (PPE)	Handle in accordance with good industrial hygiene and safety practices. Wash thorough after handling.

- **Respiratory protection**: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.
- **Eye protection**: Chemical safety goggle
- **Skin protection**: Protective gloves and lab coat. Use nitrile rubber gloves with a minimum layer thickness of 0.11 mm.

9. PHYSICAL/CHEMICAL PROPERTIES

9.1 Appearance	Colorless liquid
9.2 Odor	No data available.
9.3 Odor threshold	No data available.
9.4 pH	No data available.
9.5 Melting point/freezing point	No data available.
9.6 Initial boiling point and boiling range	100 °C (212 °F) at 1013 hPa
9.7 Flash point	85 °C (185 °F)
9.8 Evaporation rate	No data available.
9.9 Flamability (solid, gas)	No data available.
9.10 Upper/lower flammability or explosive limits	Upper explosive limit: 70% (V) Lower explosive limit 7% (V)
9.11 Vapor pressure	52 hPa at 39 °C

9.12 Vapor density	No data available.
9.13 Relative density	1.080 g/cm^3
9.14 Solubility	Completely miscible in water
9.15 Partition coefficient	No data available.
9.16 Auto-ignition temperature	No data available.
9.17 Decomposition temperature	No data available.
9.18 Viscosity	No data available.
9.19 Explosive properties	No data available.
9..20 Oxidizing properties	No data available.

10. STABILITY/REACTIVITY

10.1 Reactivity	No data available.
10.2 Chemical stability	Stable
10.3 Possiblity of hazardous reactions	No data available.
10.4 Conditions to avoid	Heat, flames, and sparks
10.5 Incompatible materials	Oxidizing agents, strong bases, acids, alkali metals, amines, acid chlorides, acid anhydrides, reducing agents, peroxides, isocyanates, phenol, aniline
10.6 Hazardous decomposition products	No data available.

11. TOXICOLOGICAL INFORMATION

11.1 Toxicology effects

- **Acute Toxicity**: No data available.
- **Skin corrosion/irritation**: No data available.
- **Serious eye damage/eye irritation**: No data available.
- Respiratory or skin sensitization: No data available.
- Germ cell mutagenicity: No data available.
- Carcinogenicity:
  - IARC: 1-Group 1: Carcinogenic to humans (formaldehyde)
  - NTP: Know to be human carcinogen (formaldehyde)
  - OSHA: Specifically regulated carcinogen (formaldehyde)
- **Reproductive toxicity**: No data available.
- **Specific target organ toxicity, single exposure**: No data available.
- **Specific target organ toxicity, repeated exposure**: No data available.
- **Aspiration hazard**: No data available.

11.2 Symptoms related to the physical, chemical or toxicological characteristics	No data available.
11.3 Effects of short-term exposure	No data available.
11.4 Effects of long-term exposure	No data available.
11.5 Numerical measures of toxicity	No data available.
11.6 Other information:	Liver – irregularities – based on human evidence Stomach – irregularities – based on human evidence Liver – irregularities – based on human evidence (Formaldehyde) Stomach – irregularities – based on human evidence (Methanol)

12. ECOLOGICAL INFORMATION

12.1 Toxicity	No data available.
12.2 Persistence and degradability	No data available.
12.3 Bioaccumulative potential	No data available.
12.4 Mobility in soil	No data available.
12.5 Results of PBT and vPvB assessment	No data available.
12.6 Other adverse effects	No data available.

13. DISPOSAL CONSIDERATIONS

13.1 Disposal method	Waste must be disposed of in accordance with federal, state, and local environmental control regulations.
13.2 Personal safety	Refer to Section 8

14. TRANSPORT INFORMATION

This product is non-hazardous for transport

15. REGULATORY INFORMATION

U.S. Federal Regulations

- SARA 313 components: The following components are subject to reporting levels established by SARA Title III, Section 313:
  Methanol, CAS-No. 67-56-1, Revision Date: 2007-07-01
  Formaldehyde, CAS-No. 50-00-0, Revision Date: 2007-07-01.
- SARA 302 components: The following components are subject to reporting levels established by SARA Title III, Section 302:
  Formaldehyde, CAS-No. 50-00-0, Revision Date: 2007-07-01
- SARA 311/312 Hazards: Fire hazard, Acute health hazard, Chronic health hazard
- Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see CFR 61): Does not contain any components subject to reporting.

U.S. State Regulations

- California Proposition 65: Warning! This product contains a chemical known to the State of California to cause cancer.
  Formaldehyde, CAS No. 50-00-0
  Warning! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.
  Methanol, CAS No. 67-56-1.
- Massachusetts Right To Know Components: Formaldehyde, CAS-No. 50-00-0
  Methanol, CAS-No. 67-56-1
- Pennsylvania Right To Know Components: Formaldehyde, CAS-No. 50-00-0
  Methanol, CAS-No. 67-56-1
- New Jersey Right To Know Components: Formaldehyde, CAS-No. 50-00-0
  Methanol, CAS-No. 67-56-1
  Disodium hydrogenorthoposphate, CAS-No. 7558-79-4

WHMIS Hazard Class	D01A, D-2A,,D-2B, D-E, B-2A
Regulation (EC) No 1907/2006) Directive 67/548/EC & Directive 1999/45/EC	This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006. Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable. Take note of Dir 94/33/EC on the protection of young people at work.

16. OTHER INFORMATION

Notice	The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. REPROCELL, Inc. shall not be held liable for any damage resulting from handling or from contact with the product. See REPROCELL, Inc. website for terms and conditions of sale.
Preparation Date	11/20/2026
Version No.	3
Prepared By	Quality Control

END OF SAFETY DATA SHEET