**SDS #:** 332.00 **Revision Date:** March 21, 2014

DANGER

Pictograms

# SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

# FAA Solution

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word

# SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Flammable liquids (Category 2). Highly flammable liquid and vapor (H225). Keep away from heat, sparks, open flames, and hot surfaces. No smoking (P210).

Hazard class: Acute toxicity, oral (Category 4). Hazard class: Acute toxicity, inhalation (Category 4). Harmful if swallowed or inhaled (H302 and H332).

Hazard class: Carcinogenicity (Category 2). Suspected of causing cancer (H351). Obtain special instructions before use (P201). Do not handle until all safety precautions have been read and understood (P202). Use personal protective equipment as required (P281). Formaldehyde is a known human carcinogen (IARC-1).

Hazard class: Specific target organ toxicity, repeated exposure (Category 1). Causes damage to organs (H372). Do not eat, drink or smoke when using this product (P270). Do not breathe mist, vapors or spray (P260).

# SECTION 3 - COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Formaldehyde Acetic acid Ethyl alcohol, denatured Water	50-00-0 64-19-7 64-17-5 7732-18-5	HCHO CH <sub>3</sub> COOH C <sub>2</sub> H <sub>5</sub> OH H <sub>2</sub> O	30.03 60.05 46.07 18.00	2% 5% 55% 38%
Synonym: Formalin-aceto-alcohol solution				

### SECTION 4 — FIRST AID MEASURES

If exposed or concerned: Get medical advice or attention (P308+P313).

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340).

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing. **If on skin (or hair):** Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353). **If swallowed:** Rinse mouth. Call a POISON CENTER or physician if you feel unwell (P302+P301+P312).

## SECTION 5 — FIRE FIGHTING MEASURES

Class IC flammable liquid due to ethyl alcohol content.	NFPA CODE
Flash point: 24 °C	Н-2
When heated, releases flammable fumes.	F-3
In case of fire: Use a tri-class dry chemical fire extinguisher (P370+P378).	R-0

# SECTION 6 — ACCIDENTAL RELEASE MEASURES

Remove all ignition sources and ventilate area. Contain the spill with sand or other inert absorbent material and deposit in a sealed bag or container. See Sections 8 and 13 for further information.

### SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Organic #2. Store with alcohols, glycols, amines and amides. Store in a Flinn Chem-Saf<sup>TM</sup> bag. Keep container tightly closed (P233). Keep cool (P235). Use only in a hood or well-ventilated area (P271).

### SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). Use only in a hood or well-ventilated area (P271). In case of inadequate ventilation, wear respiratory protection (P285). **Exposure guidelines:** (as formaldehyde) TLV-C 0.3 ppm (ACGIH); PEL 0.75 ppm (OSHA). **Odor threshold** 0.05 - 1 ppm. If the odor of formaldehyde is detected more ventilation is needed.

pH: acidic

#### SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Clear liquid. Pungent odor. Hazardous materials: formaldehyde, acetic acid, ethyl alcohol.

### SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with sources of ignition or open flames. Shelf life: Good, if stored properly.

#### SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Severe eye irritant, sensitizer. Chronic effects: Pulmonary edema, carcinogen, mutagen. Target organs: Eyes, kidneys. Effects may be delayed. ORL-RAT  $LD_{50}$ : 100 mg/kg (as formaldehyde) IHL-RAT  $LC_{50}$ : 203 mg/m<sup>3</sup> (as formaldehyde) SKN-RBT  $LD_{50}$ : 0.27 mL/kg (as formaldehyde)

N.A. = Not available, not all health aspects of this substance have been fully investigated.

#### SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

#### SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding. Flinn Suggested Disposal Method #18b is one option.

#### SECTION 14 — TRANSPORT INFORMATION

Shipping name: Ethyl alcohol solution. Hazard class: 3, Flammable liquid. UN number: UN1170.

#### N/A = Not applicable

### SECTION 15 — REGULATORY INFORMATION

Not listed.

#### SECTION 16 — OTHER INFORMATION

This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals. **Revision Date:** March 21, 2014