

FLINN SCIENTIFIC, INC.

Safety Data Sheet (SDS)

SDS #: 353.00

Revision Date: March 21, 2014

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Formalin, Buffered

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

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **DANGER**

Pictograms



SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Flammable liquids (Category 4). Combustible liquid (H227). Keep away from heat, sparks, open flames, and hot surfaces. No smoking (P210).

Hazard class: Acute toxicity, oral (Category 4). Harmful if swallowed (H302).

Hazard class: Skin corrosion or irritation (Category 3). Causes mild skin irritation (H316).

Hazard class: Serious eye damage or irritation (Category 1). Causes serious eye damage (H318).

Hazard class: Sensitization, respiratory (Category 1). May cause allergy or asthma symptoms or breathing difficulties if inhaled (H334). Avoid breathing mist, vapors or spray (P261).

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).

Hazard class: Specific target organ toxicity, single exposure (Category 1). Causes damage to organs (H370). Do not eat, drink or smoke when using this product (P270).

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Formaldehyde	50-00-0	HCHO	30.03	3.7%
Methyl alcohol	67-56-1	CH ₃ OH	32.04	1.5%
Sodium phosphate monobasic	10049-21-5	NaH ₂ PO ₄ ·H ₂ O	137.99	<0.5%
Sodium phosphate dibasic anhydrous	7558-79-4	Na ₂ HPO ₄	141.96	<1%
Water	7732-18-5	H ₂ O	18.00	>93.3%

SECTION 4 — FIRST AID MEASURES

If exposed or experiencing respiratory symptoms: Call a POISON CENTER or physician (P307+P311).

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338).

If on skin: Rinse with water for several minutes. **If irritation occurs:** Get medical advice or attention (P332+P313).

If swallowed: Rinse mouth (P330). **If you feel unwell:** Call a POISON CENTER or physician (P301+P312).

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solution.

In case of fire: Use a tri-class dry chemical fire extinguisher.

NFPA CODE
None
established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

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

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Organic #3. Store with hydrocarbons, oils, esters and aldehydes. Keep cool (P235). Do not breathe mist, vapors or spray (P260).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). In case of inadequate ventilation, wear respiratory protection (P285). **Exposure guidelines:** 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.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Clear, colorless liquid. Characteristic odor.

Biological use: Tissue fixative.

Neutral and buffered.

Soluble: Water and alcohol

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with strong acids, strong bases, and strong oxidizers.

Shelf life: Indefinite, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Highly toxic, severe eye irritant, sensitizer.

ORL-RAT LD₅₀: 100 mg/kg as formaldehyde

Chronic effects: Pulmonary edema, possible carcinogen mutagen.

IHL-RAT LC₅₀: 203 mg/m³ as formaldehyde

Target organs: Eyes, kidneys.

SKN-RBT LD₅₀: 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 #2 is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

Not listed.

SECTION 16 — OTHER INFORMATION

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Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.

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