

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 126.00

Revision Date: February 24, 2012

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Bouin's Solution

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

CHEMTREC Emergency Phone Number: (800) 424-9300

SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

Picric acid (88-89-1) 1%, Formaldehyde (50-00-0) 9.5%, Acetic acid (64-19-7) 5%, and Water (7732-18-5) 84.5%.

CAS#: None established

SECTION 3 — HAZARDS IDENTIFICATION

Yellow solution. Formaldehyde odor.

Slightly acidic, formaldehyde containing solution.

Formaldehyde is a known human carcinogen (IARC-1).

Picric acid is poisonous and if allowed to dry is a powerful explosive. Avoid ingestion, inhalation, and skin absorption.

FLINN AT-A-GLANCE

Health-3

Flammability-0

Reactivity-1

Exposure-2

Storage-0

0 is low hazard, 3 is high hazard

SECTION 4 — FIRST AID MEASURES

Call a physician and seek medical attention for further treatment, observation, and support after first aid.

Inhalation: Remove to fresh air at once. If breathing has stopped, give artificial respiration immediately.

Eye or External: Immediately flush with fresh water for at least 15 minutes.

Internal: Do NOT induce vomiting. Rinse mouth. Call a physician or poison control at once.

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solution.

NFPA CODE

None
established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from the area and ventilate area. Contain the spill with sand or 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 #4. Store with ethers, ketones, halogenated hydrocarbons, and ethylene oxide. Use and dispense in a hood.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and apron. Use ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a PAPR when handling this material in emergency situations (spill or fire). **Odor threshold** formaldehyde 0.05 - 1 ppm. If the odor of formaldehyde is detected more ventilation is needed. Exposure guidelines: TWA 0.016 ppm (NIOSH)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Yellow colored liquid with a formaldehyde odor.

Picric acid CAS #88-89-1 1%

Formaldehyde CAS #50-00-0 9.5%

Acetic Acid CAS #64-19-7 5%

SECTION 10 — STABILITY AND REACTIVITY

Picric acid is poisonous and if allowed to dry is a powerful explosive.

Shelf-life: Poor, do not plan on storing this chemical.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: N.A.

ORL-RAT LD₅₀: N.A.

Chronic effects: N.A.

IHL-RAT LC₅₀: N.A.

Target organs: N.A.

SKN-RBT LD₅₀: N.A.

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 #4a 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

This Material Safety Data Sheet (MSDS) 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.**