

## Starch-Malonic Acid-Manganese Sulfate Solution Safety Data Sheet (SDS)

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Starch-Malonic Acid-Manganese Sulfate Solution

Signal Word  
**WARNING**

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

Chemtrec Emergency Phone Number: (800) 424-10385

Pictograms

### SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Skin and serious eye damage, corrosion or irritation (Category 2, 2B). Causes skin and eye irritation (H315+H320).



### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Potato starch	9005-84-9	Unspecified	Unspecified	0.06%
Malonic acid	141-82-2	CH <sub>2</sub> (CO <sub>2</sub> H) <sub>2</sub>	104.07	1.5%
Manganese(II) sulfate monohydrate	15244-36-7	MnSO <sub>4</sub> •H <sub>2</sub> O	169.01	0.3%
Water	7732-18-5	H <sub>2</sub> O	18.00	98%

### SECTION 4 — FIRST AID MEASURES

Get medical advice or attention (P313).

**If inhaled:** Call a POISON CENTER or physician if you feel unwell.

**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 eye irritation persists eyes:** Get medical advice or attention (P337+P313).

**If on skin:** Wash with plenty of water (P302+P352). **If skin irritation occurs:** Get medical advice or attention (P332+P313).

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

### SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solution.  
In case of fire: Use a tri-class dry chemical fire extinguisher.

**NFPA Code**  
None established

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**SECTION 6 — ACCIDENTAL RELEASE MEASURES**

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Wipe up the spill, place in a sealed bag or container, and dispose. Wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

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**SECTION 7 — HANDLING AND STORAGE**

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Flinn Suggested Chemical Storage Pattern: Organic #1. Store with acids, anhydrides and peracids.  
Avoid storing for prolonged periods. Will grow mold, bacteria, or algae especially if exposed to strong light. Store in a cool, dry, dark place.

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**SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION**

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Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264).

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Colorless liquid. Odorless.

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**SECTION 10 — STABILITY AND REACTIVITY**

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Avoid contact with strong oxidizing agents.  
Shelf life: Fair, will mold.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Skin and eye irritation.	ORL-RAT LD <sub>50</sub> : N.A.
Chronic effects: N.A.	IHL-RAT LC <sub>50</sub> : N.A.
Target organs: Skin and eyes.	SKN-RBT LD <sub>50</sub> : N.A.

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**SECTION 12 — ECOLOGICAL INFORMATION**

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Data not yet available.

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**SECTION 13 — DISPOSAL CONSIDERATIONS**

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Please review all federal, state and local regulations that may apply before proceeding.  
Flinn Suggested Disposal Method #27f is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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

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**SECTION 15 — REGULATORY INFORMATION**

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Not listed.

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**SECTION 16 — OTHER INFORMATION**

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

N/A = Not applicable

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

Revision Date: March 21, 2014

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