

Revision date:21/7/30

# Material Safety Data Sheet

Version: 4

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

**Product name:** MANGANESE ACETATE (For C-TaqMan HBV TEST 96T) Manganese Acetate Solution  
**Product number:** 03316505018  
**Business area:** Molecular Diagnostics.  
**Supplier:** Across Biotech Jinan Co., Ltd

**Emergency telephone number:**

Shanda Rd 160, Lixia distric, Jinan, China,

0086-531-68652497 sales@acrossbiotech.com

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Weight %	OSHA PEL:	OSHA STEL:	ACGIH TLV:	ACGIH STEL:
Manganese acetate tetrahydrate	6156-78-1	1-5	NA	5 mg/m <sup>3</sup> Ceiling 5 mg/m <sup>3</sup> Ceiling	0.2 mg/m <sup>3</sup>	NA

## 3. HAZARDS IDENTIFICATION

### Emergency Overview

**NFPA Ratings:** Health= 1 Flammability= 0 Reactivity= 0 Special= I

**Special Definitions:** A=Allergen CA=Carcinogen CO=Corrosive F=Flammable H=Harmful I=Irritant Ox=Oxidizer PB=Potential Biohazard  
R=Reproductive S=Sensitizer T=Toxic T+=Highly Toxic W=Water Reactive

**Principle routes of exposure:** Ingestion, inhalation, skin absorption, skin and/or eye contact.

**Inhalation:** Avoid breathing vapors or mists. May cause irritation of respiratory tract.

**Ingestion:** Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea

**Skin contact:** None

**Eye contact:** Contact with eyes may cause irritation

**Sensitization or Odor threshold:** The following chemical(s) may cause sensitization, be absorbed via skin, and/or has an odor threshold for detection:

**Medical conditions aggravated by exposure:** None known

**Additional information:** None

## 4. FIRST AID MEASURES

**Inhalation:** Consult a physician. Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen

**Skin contact:** Rinse with plenty of water. If skin irritation persists, call a physician. Remove and wash contaminated clothing before re-use

**Ingestion:** Consult a physician. Do not induce vomiting without medical advice

**Eye contact:** In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice

**Notes to physician:** None determined

## 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media:** Use dry chemical, CO<sub>2</sub>, water spray or alcohol foam

**Unusual hazards:** None known

**Special protective equipment for firefighters:**

Wear self contained breathing apparatus for fire fighting if necessary

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:**

Use personal protective equipment. Evacuate personnel to safe areas

**Environmental precautions:**

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

**Methods for cleaning up:**

Never return spills in original containers for re-use. Sweep up or vacuum (if powder) or soak up with inert absorbent material (if liquid), then place into a suitable clean, dry, closed container, and label for disposal

## 7. HANDLING AND STORAGE

**Handling:**

Protect from contamination. Wear personal protective equipment

**Storage:**

No special precautions required

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering measures:**

Ensure adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

### Personal Protective Equipment

**Respiratory protection:**

Respiratory protection is not required under normal use of this product. If respiratory protection is needed, follow the OSHA regulation, 29CFR1910.134. Always use a NIOSH approved respirator when necessary

**Hand protection:**

Wear appropriate protective gloves to prevent skin contact. Replace torn or punctured gloves promptly

**Skin and body protection:**

Wear appropriate body protection to prevent skin contact

**Eye protection:**

Wear appropriate eye protection to prevent eye contact

**Hygiene measures:**

Avoid contact with skin, eyes and clothing

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Color:**

Colourless.

**Odor:**

None.

**pH:**

6.6

**Physical state:**

Liquid.

**Solubility in water:**

Soluble.

## 10. STABILITY AND REACTIVITY

**Stability:**

Stable under recommended storage conditions

**Polymerization:**

Not applicable

**Hazardous decomposition products:**

Carbon oxides. Manganese oxides.

**Materials to avoid:**

Strong acids and strong bases. Strong oxidising agents

## 11. TOXICOLOGICAL INFORMATION

Components	NIOSH - Selected LD50s and LC50s:	NIOSH Pocket Guide - Target Organs:
Manganese acetate tetrahydrate	3730 mg/kg Oral LD50 Rat 9 g/kg Oral LD50 Rat	respiratory system, CNS, blood, kidneys

**Inhalation:**

No additional data available

**Skin:**

No additional data available

**Oral:**

No additional data available

**Mutagenic effects:**

No data is available on the product itself

**Reproductive toxicity:**

No data is available on the product itself

**Carcinogenic effects:**

Components	IARC Group 1	IARC Group 2A or 2B	IARC Group 3 or 4	NTP	OSHA Select Carcinogens	EPA IRIS Carcinogen Assessment
Manganese acetate tetrahydrate						Classification: not classifiable as to human carcinogenicity; last revised: 12/01/1996; basis: existing studies are inadequate to assess the carcinogenicity of manganese

## 12. ECOLOGICAL INFORMATION

**Bioaccumulation:** Components of this product will degrade in the environment to smaller organic and inorganic constituents.

**Aquatictoxicity:** Because of the small volume of solutions in this product, no unusual effects on aquatic plants or animals are expected if this product is released into the environment.

**Ecotoxicityeffects:** No data is available on the product itself

## 13. DISPOSAL CONSIDERATIONS

**Waste from residues / unused products:** Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority. Residue from fires extinguished with this material may be hazardous.

## 14. TRANSPORT INFORMATION

**Is product hazardous to ship?** No  
**DOT**

<b>Proper shipping name:</b> None			
<b>UN Number:</b> Not applicable	<b>Hazard class:</b> Not applicable	<b>Subsidiary risk:</b> Not applicable	<b>Packing group:</b> Not applicable

### ICAO/IATA

<b>Proper shipping name:</b> None			
<b>UN Number:</b> Not applicable	<b>Hazard class:</b> Not applicable	<b>Subsidiary risk:</b> Not applicable	<b>Packing group:</b> Not applicable

## 15. REGULATORY INFORMATION

### U.S. Regulations:

**U.S. CERCLA/SARA/TSCA Regulatory Information:** The following chemicals are listed under the following TSCA/SARA/CERCLA lists. Refer to TSCA regulation if you need a definition for acronyms that may be shown in the table below

**U.S. Clean Water Act (CWA)/ California Proposition 65:** The following chemicals are listed under the CWA and/or California Proposition 65:

### Canadian Regulations:

**Canada DSL Inventory List -** This product does not comply with DSL  
**Canada NDSL Inventory List -** This product does not comply with NDSL

Components	Canada - WHMIS: Classifications of Substances:
Manganese acetate tetrahydrate	D2A (including powder)

## 16. OTHER INFORMATION

**Reason for revision:** Not applicable  
**References:** None

**Product number:** 03316505018

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**Product name:** MANGANESE ACETATE (For C-TaqMan HBV TEST 96T) Manganese Acetate Solution

## 16. OTHER INFORMATION

**Additional advice:**

None

**Prepared by:**

Roche Diagnostics, Health & Safety Department, MSDS Contact: 317-521-7425 or 317-521-7505

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**End of Safety Data Sheet**