

MATERIAL SAFETY DATA SHEET (MSDS)

MATERIAL SAFETY DATA SHEET

EM SCIENCE

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufacturer.....: EM SCIENCE
A Division of EM Industries
P.O. Box 70
480 Democrat Road
Gibbstown, N.J. 08027

Preparation Date.: 3/6/98

Information Phone Number.: 856-423-6300
Hours: Mon. to Fri. 8:30-5
Chemtrec Emergency Number: 800-424-9300
Hours: 24 hrs a day

Catalog Number(s):

SX0931

Product Name:

Starch Indicator 1% W/V with Mercuric Iodide

Synonyms:

Mixture

Chemical Family:

Mixture

Formula:

Mixture

Molecular Weight.:

N/A

2. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS #	Appr %
Starch	9005-25-8	1.0%
Mercuric Iodide	7774-29-0	0.005%
Water	7732-18-5	99%

Approx. % as wt/vol

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING: This product contains a chemical(s) known to the State of California to cause birth defects or other reproductive

harm.

Appearance:

Translucent white liquid

POTENTIAL HEALTH EFFECTS (ACUTE AND CHRONIC)

Symptoms of Exposure:

Data on the toxicity of this preparation is not available. Handling care generally in keeping with safe laboratory practices is recommended.

Medical Cond. Aggravated by Exposure:

Data not available.

Routes of Entry:

Inhalation, ingestion or skin contact.

Carcinogenicity:

The material is not listed (IARC, NTP, OSHA) as cancer causing agent.

4. FIRST AID MEASURES

Emergency First Aid:

GET MEDICAL ASSISTANCE FOR ALL CASES OF OVEREXPOSURE.

Skin: Wash thoroughly with soap and water.

Eyes: Immediately flush thoroughly with water for at least 15 minutes.

Inhalation: Remove to fresh air; give artificial respiration if breathing has stopped.

Ingestion: Get immediate medical attention.

5. FIRE FIGHTING MEASURES

Flash Point (F): None

Flammable Limits LEL (%): N/A

Flammable Limits UEL (%): N/A

Extinguishing Media:

Use any suitable for adjacent material.

Fire Fighting Procedures:

Wear self-contained breathing apparatus.

Fire & Explosion Hazards:

Thermal decomposition produces toxic fumes.

6. ACCIDENTAL RELEASE MEASURES

Spill Response:

Evacuate the area of all unnecessary personnel. Wear suitable protective equipment listed under Exposure / Personal Protection. Eliminate any ignition sources until the area is determined to be free from explosion or fire hazards. Contain the release and eliminate its source, if this can be done without risk. Take up and containerize for proper disposal as described under Disposal. Comply with Federal, State, and local regulations on reporting releases. Refer to Regulatory Information for reportable quantity and other regulatory data.

7. HANDLING AND STORAGE

Handling & Storage:

Store in a cool, dry area. Do not breathe solution mist. Do not get in eyes, on skin, or on clothing.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT:

Ventilation, Respiratory Protection, Protective Clothing, Eye Protection:

Material should be handled or transferred in an approved fume hood or with adequate ventilation. Protective gloves (Natural rubber, Neoprene, PVC or equivalent) should be worn to prevent skin contact Safety glasses with side shields should be worn at all times.

Work/Hygenic Practices:

Wash thoroughly after handling. Do not take internally. Eye wash and safety equipment should be readily available.

EXPOSURE GUIDELINES

OSHA - PEL:

Component	TWA		STEL		CL		Skin
	PPM	MG/M3	PPM	MG/M3	PPM	MG/M3	
Starch		15					
Mercuric Iodide						0.1 Hg	X
Water							

ACGIH - TLV:

Component	TWA		STEL		CL		Skin
	PPM	MG/M3	PPM	MG/M3	PPM	MG/M3	
Starch		10					
Mercuric Iodide						.025 Hg	X
Water							

If there are no exposure limit numbers listed in the Exposure Guidelines chart, this indicates that no OSHA or ACGIH exposure limits have been established.

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point (C 760 mmHg) : N/A

Melting Point (C) : N/A

Specific Gravity (H₂O = 1) : N/A

Vapor Pressure (mm Hg) : N/A

Percent Volatile by vol (%) : N/A

Vapor Density (Air = 1) : N/A

Evaporation Rate (BuAc = 1) : N/A

Solubility in Water (%) : Soluble

Appearance :

Translucent white liquid

10. STABILITY AND REACTIVITY

Stability: Yes

Hazardous Polymerization:

Does not occur

Hazardous Decomposition:

CO_x, Hg, I₂

Conditions to Avoid:

None

Materials To Avoid:

- () Water
- () Acids
- () Bases
- () Corrosives
- (X) Oxidizers
- (X) Other: Sodium, Potassium

11. TOXICOLOGICAL INFORMATION

Toxicity Data

None established

Toxicological Findings:

None

Cited in Registry of Toxic Effects of Chemical Substances (RTECS)

12. DISPOSAL CONSIDERATIONS

EPA Waste Numbers: D009

Treatment:

Specified Technology - Contact your local permitted waste disposal site (TSD) for permissible treatment sites.
 ALWAYS CONTACT A PERMITTED WASTE DISPOSER (TSD) TO ASSURE COMPLIANCE WITH ALL
 CURRENT LOCAL, STATE AND FEDERAL REGULATIONS.

13. TRANSPORT INFORMATION

DOT Proper Shipping Name:

non-regulated

DOT ID Number :

none

14. REGULATORY INFORMATION

TSCA Statement:

This product is a "Mixture". The CAS numbers of all components are listed on the TSCA Inventory.

Component	SARA EHS (302)	SARA EHS TPQ (lbs)	CERCLA RQ (lbs)
-----------	----------------------	--------------------------	-----------------------

Starch

Mercuric Iodide

Water

Component	OSHA Floor List	SARA 313	DeMinimis for SARA 313 (%)
-----------	--------------------	-------------	----------------------------------

Starch

Y

Mercuric Iodide

Water

If there is no information listed on the regulatory information chart, this indicates that the chemical is not covered by the specific regulation listed.

15. OTHER INFORMATION

Comments:

None

NFPA Hazard Ratings:

Health : 1
Flammability : 0
Reactivity : 0
Special Hazards :

Revision History: 3/6/98

| = Revised Section

N/A = Not Available

N/E = None Established

The statements contained herein are offered for informational purposes only and are based upon technical data that EM Science believes to be accurate. It is intended for use only by persons having the necessary technical skill and at their own discretion and risk. Since conditions and manner of use are outside our control, we make **NO WARRANTY, EXPRESS OR IMPLIED, OR MERCHANTABILITY, FITNESS OR OTHERWISE.**