

CAB



**Curtin Matheson Scientific, Inc.**  
 1225 N MICHAEL DRIVE  
 WOOD DALE, IL 60191-1019

# MATERIAL SAFETY DATA SHEET

**MAIL TO:** SCHOOLCRAFT COLLEGE  
 HPS MEMBER  
 18600 HAGGERTY RD.  
 LIVONIA, MI 48152-2696

## SECTION 1 - NAME AND PRODUCT

**MANUFACTURER NAME AND ADDRESS**  
 EM SCIENCE  
 A DIV OF EM INDUSTRIES  
 P.O. BOX 70  
 GIBBSTOWN NJ 08027  
**EMERGENCY PHONE** 1-800-424-9300(CHEMTREC)

**CHEMICAL NUMBER:** MSX0355-1  
**ITEM NUMBER:** 0404004  
**VNDR CATLG NBR:**  
**ENTRY DATE:** 02-24-90  
**CHANGE DATE:** 05-26-95  
**PO NUMBER:** 82676

**COMMON NAME (ON LABEL)**  
 SODIUM BORATE, DECAHYDRATE

**CHEMICAL FAMILY**  
 INORGANIC SALT

**TRADE NAME & SYNONYMS**  
 SODIUM BORATE, DECAHYDRATE  
 SODIUM TETRABORATE; BORAX

**CHEMICAL FORMULA**  
 NA2B4O7.10H2O

## SECTION 2 - HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENT	CAS	% (WT)	TLV	PEL
SODIUM BORATE, DECAHYDRATE	1303-96-4	100.00	1.000 MG/M3	10.000 MG/M3

**PEL:** Permissible Exposure Limit established by the Occupational Safety and Health Administration (OSHA).  
**TLV:** Threshold Limit Value established by the American Conference of Governmental Industrial Hygienists, 1986-87.

### OTHER INGREDIENT INFORMATION

-N/A.

## SECTION 3 - PHYSICAL DATA

<b>BOILING POINT</b> 1575C *	<b>VOLATILE BY VOLUME (%)</b> N/A	<b>VAPOR PRESSURE</b> N/A 20C
<b>MELTING POINT</b> 75-320C	<b>VAPOR DENSITY</b> N/A	<b>SOLUBILITY IN WATER</b> SOLUBLE
<b>EVAPORATION RATE (</b> = 1) N/A	<b>SPECIFIC GRAVITY</b> 1.73	

**APPEARANCE AND ODOR**  
 WHITE CRYSTALS OR POWDER

**OTHER PHYSICAL DATA**  
 MOLECULAR WEIGHT.: 381.42

**SECTION 4 - FIRE AND EXPLOSION DATA****FLASH POINT**

NONCOMBUSTIBLE

**LOWER EXPLOSIVE LIMIT**

N/A

**UPPER EXPLOSIVE LIMIT**

N/A

**EXTINGUISHING MEDIA**

ANY SUITABLE FOR ADJACENT MATERIALS.

**UNUSUAL FIRE AND EXPLOSION HAZARDS**

-NONE INDICATED.

**SPECIAL FIRE FIGHTING PROCEDURES**

WEAR SELF-CONTAINED BREATHING APPARATUS.

**SECTION 5 - HEALTH HAZARD DATA****HEALTH HAZARDS (ACUTE & CHRONIC)**

SEE SIGNS AND SYMPTOMS OF EXPOSURE.

**PRIMARY ROUTES OF EXPOSURE**

INHALATION, INGESTION.

**SIGNS AND SYMPTOMS OF EXPOSURE**

-MAY BE HARMFUL IF SWALLOWED OR INHALED MAY

IRRITATE EYES, SKIN, NASAL AND RESPIRATORY PASSAGES INGESTION MAY CAUSE NAUSEA,  
HEADACHE, DIARRHEA, SHOCK, CENTRAL NERVOUS SYSTEM DISTURBANCES.

**SECTION 5 - HEALTH HAZARD DATA (CONTINUED)**

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE**  
 DATA NOT AVAILABLE.

**CARCINOGENICITY**

NTP  Yes  No    IARC  Yes  No    OSHA  Yes  No

THE MATERIAL IS NOT LISTED AS A CANCER CAUSING AGENT.

**EMERGENCY AND FIRST AID PROCEDURES**

GET MEDICAL ASSISTANCE FOR ALL CASES OF OVEREXPOSURE EYES:  
 IMMEDIATELY FLUSH THOROUGHLY WITH LARGE AMOUNTS OF WATER SKIN: IMMEDIATELY FLUSH THOROUGHLY WITH LARGE AMOUNTS OF WATER. INHALATION: REMOVE TO FRESH AIR; GIVE ARTIFICIAL RESPIRATION IF BREATHING STOPPED.  
 INGESTION: IF CONSCIOUS, DRINK WATER AND INDUCE VOMITING IMMEDIATELY AS DIRECTED BY MEDICAL PERSONNEL. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

**THRESHOLD LIMITS / TOXICITY DATA**

ACGIH TLV/OSHA PEL (TWA).....: 1 MG/M3  
 (TWA) OSHA-PEL: 10 MG/M3 (TWA) TOXICITY DATA.....:  
 -ORL-HMN LDLO: 709 MG/KG ORL-INF LDLO: 1000  
 MG/KG ORL-RAT LD50: 2660 MG/KG.

**SECTION 6 - REACTIVITY DATA**

**STABILITY**    Unstable  Stable   
**CONDITIONS TO AVOID**  
 -NONE INDICATED.

**INCOMPATIBILITY (MATERIALS TO AVOID)**  
 ACIDS.

## SECTION 6 - REACTIVITY DATA (CONTINUED)

**HAZARDOUS DECOMPOSITION OR BYPRODUCTS**  
OXIDES OF CARBON, NITROGEN AND PHOSPHOROUS.

**HAZARDOUS POLYMERIZATION** May Occur  Will Not Occur   
**CONDITIONS TO AVOID**  
WILL NOT OCCUR.

## SECTION 7 - SPILL, LEAK, AND DISPOSAL PROCEDURES

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED**  
CONTAIN THE SPILL WITH ABSORBENT MATERIAL OR MOP UP WITH WATER.

**WASTE DISPOSAL METHOD**  
DISPOSAL SHOULD BE CARRIED OUT IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

## SECTION 8 - SPECIAL PROTECTION INFORMATION

**RESPIRATORY PROTECTION**  
NONE

**LOCAL VENTILATION**

N/A

**MECHANICAL VENTILATION**

GENERAL

**SPECIAL VENTILATION**

N/A