



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: MSX0693-2

ITEM NUMBER: 0748558

VNDR CATLG NBR:

ENTRY DATE: 02-24-90

CHANGE DATE: 08-22-95

PO NUMBER: 82676

### COMMON NAME (ON LABEL)

SODIUM PERCHLORATE, MONOHYDRATE

### CHEMICAL FAMILY

SALT

### TRADE NAME & SYNONYMS

PERCHLORIC ACID SODIUM SALT

SODIUM PERCHLORATE, MONOHYDRATE

### CHEMICAL FORMULA

NACLO4 . H2O

## SECTION 2 - HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENT	CAS	% (WT)	TLV	PEL
SODIUM PERCHLORATE, MONOHYDRATE	7791-07-3	100.00	.000 SEC.5	.000 SEC.5

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

NONE OTHER THAN SPECIFIED PRODUCT.

## SECTION 3 - PHYSICAL DATA

BOILING POINT	VOLATILE BY VOLUME (%)	VAPOR PRESSURE
DECOMPOSES	N/A	N/A 20C
MELTING POINT	VAPOR DENSITY	SOLUBILITY IN WATER
482C	N/A	SOLUBLE
EVAPORATION RATE ( BUAC = 1)	SPECIFIC GRAVITY	
N/A	2.02	
APPEARANCE AND ODOR		
WHITE, DELIQUESCENT, ODORLESS CRYSTALS		
OTHER PHYSICAL DATA		
MOLECULAR WEIGHT.: 140.46		

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

NONE

**LOWER EXPLOSIVE LIMIT**

N/A

**UPPER EXPLOSIVE LIMIT**

N/A

**EXTINGUISHING MEDIA**

FLOOD WITH WATER.

**UNUSUAL FIRE AND EXPLOSION HAZARDS**

FORMS EXPLOSIVE MIXTURES WITH COMBUSTIBLE, ORGANIC, OR OTHER  
EASILY OXIDIZABLE MATERIALS. THESE MIXTURES ARE EASILY IGNITED BY FRICTION OR HEAT.  
CONTAINERS MAY EXPLODE WHEN INVOLVED IN FIRE.  
LIBERATES TOXIC GASES WHEN INVOLVED IN FIRE.

**SPECIAL FIRE FIGHTING PROCEDURES**

FIRE FIGHTING PROC..... WEAR SELF-CONTAINED BREATHING APPARATUS AND  
PROTECTIVE CLOTHING.

**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**

HARMFUL IF SWALLOWED. IRRITATING TO SKIN,  
EYES AND MUCOUS MEMBRANES.

## SECTION 5 - HEALTH HAZARD DATA (CONTINUED)

## MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

N/A

## CARCINOGENICITY

THE MATERIAL IS NOT LISTED AS A CANCER CAUSING AGENT.

NTP ☐ Yes ☒ NoIARC ☐ Yes ☒ NoOSHA ☐ Yes ☒ No

## EMERGENCY AND FIRST AID PROCEDURES

GET MEDICAL ASSISTANCE FOR ALL CASES OF OVEREXPOSURE. SKIN: IMMEDIATELY FLUSH THOROUGHLY WITH LARGE AMOUNTS OF 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: IF CONSCIOUS, DRINK WATER AND INDUCE VOMITING AS DIRECTED BY MEDICAL PERSONNEL. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

## THRESHOLD LIMITS / TOXICITY DATA

ACGIH TLV/OSHA PEL (TWA): N/G. TOXICITY DATA:  
ORL-MUS LD50: 1150 MG/KG TOXICOLOGICAL FINDINGS: TESTS ON LABORATORY ANIMALS INDICATE MATERIAL MAY PRODUCE ADVERSE MUTAGENIC EFFECTS. CITED IN REGISTRY OF TOXIC EFFECTS OF SUBSTANCES (RTECS).

## SECTION 6 - REACTIVITY DATA

STABILITY Unstable ☐ Stable ☒

## CONDITIONS TO AVOID

SEPARATE FROM COMBUSTIBLE, ORGANIC, READILY OXIDIZABLE MATERIALS, ACIDS, SULFUR, CARBONACEOUS MATERIALS AND COTTON.

## INCOMPATIBILITY (MATERIALS TO AVOID)

ACIDS

**SECTION 6 - REACTIVITY DATA (CONTINUED)**

**HAZARDOUS DECOMPOSITION OR BYPRODUCTS**  
CHLORINE COMPOUNDS, NA2O

**HAZARDOUS POLYMERIZATION** May Occur ☐ Will Not Occur ☒  
**CONDITIONS TO AVOID**  
DOES NOT OCCUR

**SECTION 7 - SPILL, LEAK, AND DISPOSAL PROCEDURES****STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED**

VACUATE 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 DISPOSAL. COMPLY WITH FEDERAL, STATE, AND LOCAL REGULATIONS ON REPORTING RELEASES. REFER TO REGULATORY INFORMATION FOR REPORTABLE QUANTITY AND OTHER REGULATORY DATA.

**WASTE DISPOSAL METHOD**

EPA WASTE NUMBERS: D001. TREATMENT: 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.

**SECTION 8 - SPECIAL PROTECTION INFORMATION****RESPIRATORY PROTECTION**

IF WORKPLACE EXPOSURE LIMIT(S) OF PRODUCT OR ANY COMPONENT IS EXCEEDED (SEE TLV/PEL), A NIOSH/MSHA APPROVED AIR SUPPLIED RESPIRATOR IS ADVISED IN ABSENCE OF PROPER ENVIRONMENTAL CONTROL. OSHA REGULATIONS ALSO PERMIT OTHER NIOSH/MSHA RESPIRATORS (NEGATIVE PRESSURE TYPE) UNDER SPECIFIED CONDITIONS (SEE YOUR SAFETY EQUIPMENT SUPPLIER ). ENGINEERING AND/OR ADMINISTRATIVE CONTROLS SHOULD BE IMPLEMENTED TO REDUCE EXPOSURE.

**LOCAL VENTILATION**

SEE OTHER

**MECHANICAL VENTILATION**

SEE OTHER

**SPECIAL VENTILATION**

SEE OTHER

**SECTION 8 - SPECIAL PROTECTION INFORMATION (CONTINUED)****OTHER VENTILATION**

MATERIAL MUST BE HANDLED OR TRANSFERRED IN AN APPROVED FUME HOOD OR WITH ADEQUATE VENTILATION.

**PROTECTIVE GLOVES**

(NEOPRENE OR EQUIV) SHOULD BE WORN TO PREVENT SKIN CONTACT

**EYE PROTECTION**

SAFETY GLASSES WITH SIDE SHIELDS MUST BE WORN AT ALL TIMES

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT**

N/G

**SECTION 9 - SPECIAL PRECAUTIONS****PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE**

STORE IN A COOL PLACE AWAY FROM COMBUSTIBLE AND REDUCING MATERIALS DO NOT BREATHE DUST. DO NOT GET IN EYES, ON SKIN, OR ON CLOTHING. WASH THOROUGHLY AFTER HANDLING. DO NOT TAKE INTERNALLY. EYE WASH AND SAFETY EQUIPMENT SHOULD BE READILY AVAILABLE.

**SECTION 10 - OTHER INFORMATION****MISCELLANEOUS INFO.**

NFPA HAZARD RATINGS: HEALTH .... 2

FLAMMABILITY .... 0 REACTIVITY : 2 SPECIAL HAZARDS.:

OXY DOT SHIPPING NAME: SODIUM PERCHLORATE.

DOT NUMBER..... UN1502

COMMENTS: N/G TSCA INVENTORY: THE

CAS NUMBER OF THIS PRODUCT IS LISTED ON THE TSCA INVENTORY. N/E = NOT ESTABLISHED.

N/A = NOT AVAILABLE.:

N/G = NOT GIVEN.