Manufacturers Name & Address
J. S. BORAX AND CHEMICAL CORP.
8075 WILSHIRE BLVD.
LOS ANGELES, CA
90010-0000

Emergency Telephone-->(714) 774-2673
24 HOURS A DAY, CONTACT--J.C. MIDDLETON

For Chemical Emergency -
Exposure, or Accident
Call CHEMTREC - Day or Night
(800) 424-9300

Section I - Product Identification

Chemical Name--------> SODIUM TETRABORATE DECAHYDRATE
Product/Trade Name---> BORAX
Chemical Family------> BORATE
Synonyms---------> NOT LISTED
CAS Registry #-----> 1303-96-4

Formula---------->
NA2B4O7·10 H2O

Manufacturers Product Code--> MSDS---> BORAX
Effective Date---> 10/08/87 J. C. MIDDLETON

For Further Information Call--> (000) -0000

Designations

HMIS- -NFP-A-

Health-->
0 0 0 = Minimal

Flammability-->
0 0 1 = Slight

Reactivity-->
0 0 2 = Moderate

Protective Equipment Or
Specific Hazard-->

Section II - Hazardous Ingredients/Identity Information

Ingredients-Not Spec ic ations Percent TLV (Units)

NONE
NTP-1983 NOT LISTED
IARC MONOGRAPH-NO
OSHA CARCINOGEN-NO

Sect on Physical/Chemical Character

vapor not---> NOT LISTED NO LISTED

Gifts not---> NOT LISTED NO LISTED

...-

Den Air --> NO DATA

uibi Water
100%

Density Water(1g)= 1.73
Volatile by Volume---> NO DATA

Eaporation Rate-->

% of Undiluted Produ---> 3%

rate---> gas-- Solid- quick
Section IV - Fire & Explosion Hazard Data

Flash Point (Method Used) --- NOT APPLICABLE

Flammable Limits --- Lower --- NOT APPLICABLE
Upper --- NOT APPLICABLE

Fire Extinguishing Media --- FIRE RETARDANT.

Special Fire Fighting Procedures --- NONE

Unusual Fire & Explosion Hazards --- NONE

Autoignition Temp --- NOT LISTED F  NOT LISTED C

Section V - Health Hazard Data

Threshold Limit Value ---
OSHA/PEL --- NOT LISTED.
ACGIH 5 MG/M3 (1984-1985) NO DATA BASE
NTP-NO, IARC-NO, OSHA CARCINOGEN-NO

Health Hazards ---

INGESTION --- ACUTE ORAL LD50 (RATS) 6.13G/KG. SMALL AMOUNTS
(UP TO 15 GRAMS) - SLIGHT NAUSEA, VOMITING, DIARRHEA.
LARGE AMOUNTS (15 GRAMS OR MORE) - NAUSEA, VOMITING, DIARRHEA
-- NAUSEA, VOMITING, DIARRHEA, ERYTHEMATIC FLUSH.
EYE --- NOT AN EYE IRRITANT MAY CAUSE SLIGHT, REVERSIBLE CONJUNCTIVITIS, SLIGHT IRRITATION.
SKIN --- NONE. NONE KNOWN.
ACUTE DERMAL LD50 --- GREATER THAN 10G/KG (RABBITS).
INHALATION --- MAY CAUSE SLIGHT NASAL IRRITATION AS A NUISANCE DUST. SNEEZING, COUGHING. ACUTE LC50 -- N/A
PRIMARY SKIN IRRITATION INDEX -- 0, NON CORROSIVE

Emergency & First Aid Procedures ---

EYES --- FLUSH WITH TEPID WATER FOR 15 MINUTES.
SKIN --- RINSE WITH WATER.
INHALATION --- REMOVE TO FRESH AIR.
INGESTION --- INDUCE EMESIS. DRINK LARGE AMOUNTS OF WATER
AND/OR MILK. CONSULT PHYSICIAN.
NOTE AN ACUTE POISON. INGESTION OF LARGE AMOUNTS (15 GRAM.
OR MORE) - GASTRIC LAVAGE, WITH 5% SODIUM BICARBONATE;
SALINE CATHARTIC. FOR FURTHER MEDICAL MANAGEMENT, CALL
US BORAX EMERGENCY TELEPHONE NUMBER 714-774-2673
TWO YEAR FEEDING STUDIES ON RATS AND DOGS SHOWED NO
APPRECIABLE ACCUMULATION OF BORON IN THE BODY. INGESTED
BORATES ARE DISSIPATED IN THE URINE -- 70% IN THE FIRST 2
HOURS. NO ADVERSE EFFECTS WERE NOTED AT THE 0.31% DIETARY LEVEL.
COMPLIMENTARY BLOOD ANALYSIS AVAILABLE FOR PHYSICIANS AND
EMERGENCY ROOMS. MEDICAL CONSULTATION AVAILABLE.
### Signs & Symptoms Of Exposure

<table>
<thead>
<tr>
<th>Sensory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>INHALATION</td>
<td>COUGHING</td>
</tr>
<tr>
<td>EYES</td>
<td>SLIGHT CONJUNCTIVITIS</td>
</tr>
<tr>
<td>SKIN</td>
<td>NONE KNOWN</td>
</tr>
<tr>
<td>INGESTION</td>
<td>ERYTHEMACEOUS FLUSH, MACULAR SKIN RASH, CNS EFFECTS</td>
</tr>
</tbody>
</table>

### Medical Conditions Generally Aggravated By Exposure

- Inhalation: Sneezing, coughing
- Eyes: Slight irritation
- Skin: None.
- Ingestion: Nausea, vomiting, diarrhea, erythematous flush.

### Toxicological Data

#### Section VI - Reactivity Data

<table>
<thead>
<tr>
<th>Classification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability</td>
<td>Stable - X, Unstable - X</td>
</tr>
<tr>
<td>Conditions to Avoid</td>
<td>NO DATA LISTED</td>
</tr>
<tr>
<td>Incompatibility (Materials to Avoid)</td>
<td>ELEMENTAL ZIRCONIUM</td>
</tr>
<tr>
<td>Hazardous Combustion Or Decomposition Products</td>
<td>NONE</td>
</tr>
<tr>
<td>Hazardous Polymerization</td>
<td>May Occur - Will Not Occur - X</td>
</tr>
<tr>
<td>Conditions to Avoid</td>
<td>AVOID HEATING WITH ELEMENTAL ZIRCONIUM</td>
</tr>
</tbody>
</table>

#### Section VII - Spill, Leak, and Waste Disposal Procedures

**Control Methods**

- SWEEP OR VACUUM. RINSE AREA WITH WATER.

**Waste Disposal Methods**

- SOLID LAND FILL OR SANITARY SEWER.
- NOT CONSIDERED HAZARDOUS WASTE.

#### Section VIII - Special Protection Information

**Respiratory Protection**

- NUISANCE DUST MASK.

**Ventilation**

- LOCAL EXHAUST -
- GENERAL (MECHANICAL) -
- SPECIAL -
- OTHER -

**Personal Protection**

- PROTECTIVE CLOTHING -
- PROTECTIVE GLOVES -
- NONE REQUIRED
- EYE PROTECTION -
- GLASSES SUGGESTED
- OTHER PROTECTION -
- NONE

**Work Practices/Hygiene**

#### Section IX - Special Precautions