

Manufacturers Name & Address--> U S BORAX AND CHEMICAL CORP.
 3075 WILSHIRE BLVD.
 LOS ANGELES, CA 90010-0000

Emergency Telephone--> (714)774-2673
 24 HOURS A DAY, CONTACT--J.C.MIDDLETON
 -OR-
 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-	-NFPA-	
	====	====	
Health-->	0	0	0 = Minimal
Flammability-->	0	0	1 = Slight
Reactivity-->	0	0	2 = Moderate
Protective Equipment Or			3 = Serious
Specific Hazard-->			4 = Severe

Section II - Hazardous Ingredients/Identity Information

Ingredients-Not Spec	icat ons	Percent	TLV (Units)
NONE			
NTP-1983	NOT LISTED		
IARC MONOGRAPH-NO			
OSHA CARCINOGEN-NO			

Section Physical/Chemical Character

Boiling point--> NOT LISTED NO DATA LISTED
 Freezing point--> NOT LISTED NO DATA LISTED
 Melting point--> NOT LISTED NO DATA LISTED
 NO DATA LISTED

Density Air --> NO DATA

Sublimation Water 100%

Gravity(Water=1)--> 1.73

Volatile By Volume--> NO DATA

Evaporation Rate--> (NO DATA LISTED

Flash point of Undiluted Product --> 3% OIL 9.25 @ 200
 Ignition Temperature--> Soild-X qui

Viscosity-->
Product Density-->
Other Information-->
Molecular Weight--> NO DATA LISTED
Appearance and Odor--> WHITE, ODORLESS, CRYSTALLINE SOLID.
HEAT OF SOLUTION: -122 BTU/LB

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, DIARRHHEA.
LARGE AMOUNTS(15 GRAMS OR MORE)- NAUSEA, VOMITING, DIARRHHEA
--NAUSEA, VOMITING, DIARRHHEA, ERYTHEMACOUS FLUSH.
EYE--NOT AN EYE IRRITANT-MAY CAUSE SLIGHT, REVERSIBLE CON-
JUNCTIVITIS. 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% DIETAR
LEVEL.
COMPLIMENTARY BLOOD ANALYSIS AVAILABLE FOR PHYSICIANS AND
EMERGENCY ROOMS. MEDICAL CONSULTATION AVAILABLE.

Signs & Symptoms Of Exposure-->

INHALATION--COUGHING
EYES--SLIGHT CONJUNCTIVITIS
SKIN--NONE KNOWN
INGESTION--ERYTHEMACOUS FLUSH,MACULAR SKIN RASH: CNS EFFECTS

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

Stability--> Stable-X Unstable-

Conditions to Avoid-->
NO DATA LISTED

Incompatibility (Materials to Avoid)-->

ELEMENTAL ZIRCONIUM

Hazardous Combustion Or Decomposition Products-->

NONE

Hazardous Polymerization--> May Occur- Will Not Occur-X

Conditions to Avoid-->
AVOID HEATING WITH ELEMENTAL ZIRCONIUM

Section VII - Spill, Leak, and Waste Disposal Procedures

Spill 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--
XX
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