

FISHER SCIENTIFIC, CHEMICAL DIV. -- SODIUM BORATE DECAHYDRATE-BORAX --  
6810-00-264-9055

===== Product Identification =====

Product ID:SODIUM BORATE DECAHYDRATE-BORAX

MSDS Date:05/27/1988

FSC:6810

NIIN:00-264-9055

MSDS Number: BMBVH

=== Responsible Party ===

Company Name:FISHER SCIENTIFIC, CHEMICAL DIV.

Address:1 REAGENT LANE

City:FAIR LAWN

State:NJ

ZIP:07410

Country:US

Info Phone Num:201-796-7100

Emergency Phone Num:201-796-7100 OR 201-796-7523

CAGE:1B464

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Contractor Identification ===

Company Name:FISHER SCIENTIFIC CO. CHEMICAL MFG DIV

Address:1 REAGENT LANE

Box:City:FAIRLAWN

State:NJ

ZIP:07410-2802

Country:US

Phone:201-796-7100

CAGE:1B464

===== Composition/Information on Ingredients =====

Ingred Name:SODIUM TETRABORATE, DECAHYDRATE

CAS:1303-96-4

RTECS #:VZ2275000

Fraction by Wt: 100%

Other REC Limits:NONE SPECIFIED

OSHA PEL:10 MG/M3

ACGIH TLV:5 MG/M3; 9192

===== Hazards Identification =====

LD50 LC50 Mixture:LD50 ORAL RAT IS 2660 MG/KG

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:ACUTE-INHALE:IRRITATING & CAUSING  
FEVER,NAUSEA,VOMITING,DIARRHEA,CONVULSION,JAUNDICE,ANURIA,LIVER &  
KIDNEY DAMAGE.EYE/SKIN:IRRITATION.ORAL:MAY CAUSE VOMITING,BLOODY  
DIARRHEA,EPIGASTRIC PAIN,HEADACHE,C ONVULSIONS,CNS  
DEPRESSION,CONFUSION,COMA,DEATH.CHRONIC-KIDNEY & LIVER  
DAMAGE,DERMATITIS,C

ONJUNCTIVITIS,BRONCHITIS.

Effects of Overexposure:INHALATION IS IRRITATING & CAUSING FEVER,  
NAUSEA, VOMITING, DIARRHEA, CONVULSION, JAUNDICE, ANURIA, LIVER &  
KIDNEY DAMAGE. EYE & SKIN IRRITATION. ORALLY MAY CAUSE VOMITING,  
BLOODY DIARRHEA, EPIGASTRIC PAIN, HEADACHE, CONVULSIONS, CNS  
DEPRESSION, CONFUSION, COMA & EVEN DEATH.

Medical Cond Aggravated by Exposure:PERSONS WITH PRE-EXISTING SKIN  
DISORDERS OR EYE PROBLEMS OR IMPAIRED LIVER, KIDNEY OR RESPIRATORY  
FUNCTION MAY BE  
MORE SUSCEPTIBLE TO THE EFFECTS OF THE SUBSTANCE.

===== First Aid Measures =====

First Aid:GET MEDICAL HELP IF SYMPTOMS PERSIST.EYES:FLUSH WITH WATER  
FOR 15 MINUTES.HOLD EYELIDS OPEN.SKIN:WASH WITH SOAP &  
WATER.INHALED:REMOVE TO FRESH AIR.PROVIDE CPR/OXYGEN IF  
NECESSARY.ORAL:IF CONSCIOUS,DRINK 2-4 GLASSES OF WATER & INDUCE  
VOMITING.SEE PHYSICIAN.

===== Fire Fighting Measures =====

Flash Point:NONE

Extinguishing Media:USE WATER SPRAY, HALON, CARBON DIOXIDE, STANDARD  
FOAM OR DRY CHEMICAL. USE WATER SPRAY TO COOL FIRE EXPOSED  
CONTAINERS.

Fire Fighting Procedures:NO ACUTE HAZARD. WEAR NIOSH-APPROVED  
SELF-CONTAINED BREATHING APPARATUS/AVOID BREATHING VAPORS OR DUSTS.  
KEEP UPWIND. MOVE CONTAINER FROM FIRE AREA IF POSSIBLE.

Unusual Fire/Explosion Hazard:COMPOUND MELTS TO A GLASSY MATERIAL THAT  
MAY FLOW IN LARGE QUANTITIES AND IGNITE COMBUSTIBLE MATERIALS  
ELSEWHERE.

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===== Accidental Release Measures =====

Spill Release Procedures:SWEEP UP MATERIAL, PLACE IN A CONTAINER AND HOLD FOR WASTE DISPOSAL. VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

===== Handling and Storage =====

Handling and Storage Precautions:STORAGE-STORE IN TIGHTLY CLOSED CONTAINER AWAY FROM INCOMPATIBLE SUBSTANCES.

Other Precautions:DO NOT GET IN EYES OR ON SKIN. DO NOT GENERATE DUST. DO NOT BREATH THE DUST, MIST OR FUMES. KEEP OUT OF REACH OF CHILDREN. DO NOT TAKE INTERNALLY. WASH THOROUGHLY AFTER HANDLING.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:FOR CONDITIONS WHERE EXPOSURE TO DUST OR FUMES IS APPARENT, A NIOSH APPROVED RESPIRATOR FOR DUST MISTS AND FUMES APPROPRIATE TO THE CONCENTRATION MAY BE WORN. IN EMERGENCY, WEAR SELF-CONTAINED BREATHING APPARATUS OPERATED IN + PRESSURE.

Ventilation:PROVIDE SUFFICIENT MECHANICAL

(GENERAL AND/OR LOCAL

EXHAUST) VENTILATION TO MAINTAIN EXPOSURE BELOW TLV(S).

Protective Gloves:CHEMICAL RESISTANT GLOVES/RUBBER

Eye Protection:DUST-RESISTANT SAFETY GOGGLES

Other Protective Equipment:APPROPRIATE PROTECTIVE (IMPERVIOUS) CLOTHING AND EQUIPMENT, EYEWASH FOUNTAIN, EMERGENCY SHOWER

Work Hygienic Practices:WASH THOROUGHLY BEFORE EATING, DRINKING OR SMOKING.

Supplemental Safety and Health

===== Physical/Chemical Properties =====

HCC:N1

Melt/

Freeze Pt:M.P/F.P Text:167F,75C

Decomp Temp:Decomp Text:2867F,1575C

Spec Gravity:1.73

pH:9.5

Solubility in Water:5.92% @ 25C

Appearance and Odor:COLORLESS TO WHITE TRANSPARENT CRYSTALS/POWDER - ODORLESS

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

ZIRCONIUM: EXPLOSIVE REACTION WHEN HEATED.

Stability Condition to Avoid:HIGH HEAT, FLAME

Hazardous Decomposition Products:THERMAL DECOMPOSITION PRODUCTS MAY INCLUDE TOXIC SODIUM

M OXIDE.

===== Disposal Considerations =====

Waste Disposal Methods:WASTE DISPOSAL TO BE PERFORMED IN COMPLIANCE  
WITH ALL CURRENT LOCAL, STATE AND FEDERAL REGULATIONS.

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