

FISHER SCIENTIFIC, CHEMICAL DIV. -- SODIUM BORATE DECAHYDRATE -- 6810-00-234-8369  
===== Product Identification =====

Product ID:SODIUM BORATE DECAHYDRATE

MSDS Date:06/10/1995

FSC:6810

NIIN:00-234-8369

MSDS Number: BMBTM

=== 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 P

hone Num:201-796-7100/800-424-9300(CHEMTREC)

CAGE:1B464

=== Contractor Identification ===

Company Name:FISHER SCIENTIFIC CO

Address:2000 PARK LN

Box:City:PITTSBURGH

State:PA

ZIP:15275

Country:US

Phone:412-490-8586

CAGE:22527

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

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AS:1303-96-4  
RTECS #:VZ2275000  
Fraction by Wt: 100%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:10 MG/M3  
ACGIH TLV:5 MG/M3; 9596

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

LD50 LC50 Mixture:ORAL LD50 (MS) IS 2G/KG  
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:\*\*IRRITANT,NARCOTIC,TOXIC TO THE  
LIVER\*\* EYES:IRRITATION.SKIN:MAY BE ABSORBED THROUGH DAMAGED SKIN  
CAUSING S  
SYSTEMIC EFFECTS.IRRITATION.INGEST:GI TRACT IRRITATION.SEE  
SYSTEMIC EFFECTS BELOW.INHAL:MAY CAUSE RESPIRATORY  
IRRITATION.CHRONIC:BRONCHITIS,LARYNGITIS,DERMATITIS,CONJUNCTIVITIS.  
MAY DAMAGE LIVER AND KIDNEYS.  
Explanation of Carcinogenicity:THERE ARE NO INGREDIENTS ABOVE 0.1%  
WHICH ARE IDENTIFIED AS CARCINOGENS BY NTP,IARC OR OSHA.  
Effects of Overexposure:SYSTEMIC EFFECTS:MALaise,NAUSEA,SEVERE  
EPIGASTRIC PAIN,HEMORRAGIC GASTROENTERITIS,BLOOD AND VOMITUS AND  
DIARRHEA,WEAKNES  
S,LEATHARGY,FEVER,HEADACHE,TACHYCARDIA,TACHYPNEA,RE  
STLESSNESS,DELIRIUM,TREMORS,FACEAL TWITCHING,INTERMITTENT  
CONVULSIONS,CNS DEPRESSION,SHOCK(COLD CLAMMY SKIN,CYANOSIS,THREADY  
PULSE,HYPOTENSION).  
Medical Cond Aggravated by Exposure:PERSONS WITH PRE-EXISTING LIVER AND  
KIDNEY AILMENTS MAY BE AT INCREASED RISK FROM EXPOSURE.

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

First Aid:SKIN:REMOVE CONTAMINATED CLOTHING;WASH WITH SOAP OR MILD  
DETERGENT AND WATER.GET MEDICAL ATTENTION.EYES:FLUSH WITH NORMAL  
SALINE OR WATER FOR 15 MINUTES.GET MEDICAL IMMEDIATE  
ATTENTION.INHAL:REMOVE TO FRESH AIR.GIVE OXYGEN OR ARTIFICIAL  
RESPIRATION IF NEEDED.GET IMMEDIATE MEDICAL ATTENTION.INGEST:GET  
PROMPT QUALIFIED MEDICAL ATTENTION.IF CONSCIOUS,INDUCE  
VOMITING(IPECAC);FOLLOW W/ ACTIVD CHARCOAL.

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

Flash Point:NONE  
Extinguishing Media:USE MEDIA APPROPRIATE FOR SURROUNDING FIRE.

Fire Fighting Procedures:USE A SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE EQUIPMENT.

Unusual Fire/Explosion Hazard:NONE SPECIFIED BY MANUFACTURER.

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

Spill Release Procedures:SWEEP;DO NOT CREATE DUST;PLACE IN AN APPROPRIATE CONTAINER FOR RECLAMATION OR DISPOSAL.DO NOT FLUSH SPILLED MATERIAL TO SEWER.KEEP UNNECESSARY PEOPLE AWAY.

Neutralizing Agent:NOT APPLICABLE.

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

Handling and Storage Precautions:STORE IN A COOL, DRY, WELL-VENTILATED PLACE.KEEP CONTAINER CLOSED WHEN NOT IN USE.KEEP AWAY FROM INCOMPATIBLE MATERIALS.

Other Precautions:IF MATERIAL IS INVOLVED IN A FIRE IT MAY MELT INTO A GLASSY MATERIAL WHICH CAN FLOW AND IGNITE COMBUSTIBLE MATERIALS.

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

Respiratory Protection:WHERE ENVIRONMENTAL CONTROLS ARE LACKING OR IN ENCLOSED SPACES USE EITHER A SELF-CONTAINED BREATHING APPARATUS OR A NIOSH/MSHA APPROVED RESPIRATOR FOR DUST AND MISTS, DEPENDING ON THE AIRBORN CONCENTRATION.

Ventilation:PROVIDE LOCAL EXHAUST.

Protective Gloves:IMPERVIOUS GLOVES.

Eye Protection:DUST-PROOF GOGGLES

Other Protective Equipment:PROTECTIVE CLOTHING, AS NEEDED. PROVIDE A LOCAL EYE WASH STATION AND SAFETY SHOWER.

Work Hygienic Practices:USE REASONABLE CARE IN HANDLING THIS PRODUCT. WASH HANDS AFTER USE AND BEFORE EATING.

Supplemental Safety and Health

Health

GASTRIC LAVAGE SHOULD BE PERFORMED BY QUALIFIED MEDICAL PERSONNEL. EFFLORESCENT IN DRY AIR. LOSES 5 WATERS OF HYDRATION AT 212F/6@302F/10@608F.

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

HCC:N1

Boiling Pt:B.P. Text:680F,360C

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

Spec Gravity:1.73

pH:9.5 AQ

Solubility in Water:MODERATE

Appearance and Odor:ODORLESS, HARD CRYSTALS, GRANULES OR CRYSTALLINE POWDER WITH A WHITE COATING. SUPP

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

tivity Data =====

Stability Indicator/Materials to Avoid: YES

ZIRCONIUM (EXPLOSIVE REACTION WHEN HEATED).

Stability Condition to Avoid: NONE SPECIFIED BY MANUFACTURER.

Hazardous Decomposition Products: SODIUM OXIDE (TOXIC).

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

Waste Disposal Methods: DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

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