

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 Ph

one 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

CA

S: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

===== 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 SY  
STEMIC 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,WEAKNESS  
,LETHARGY,FEVER,HEADACHE,TACHYCARDIA,TACHYPNEA,RESTLESSNESS,DELIRIUM,TREMORS,FAcial 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.

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

First Aid:SKIN:REMOVE CONTAMINATED CLOTHING;WASH WITH SOAP OR MILD  
DETERGENT AND WATER  
EYES: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.

===== 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

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GASTRIC LAVAGE SHOULD BE PERFORMED BY QUALIFIED MEDICAL PERSONNEL. EFFLORESCENT IN DRY AIR. LOOSES 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 React =====

ivity 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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