

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  
C

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

===== 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  
YSTEMIC 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,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 WA  
TER.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

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.

Disclaimer (provided with this information by the compiling agencies):

This information is formulated

for use by elements of the Department

of Defense. The United States of America in no manner whatsoever,

expressly or implied, warrants this information to be accurate and

disclaims all liability for its use. Any person utilizing this

document should seek competent professional advice to verify and

assume responsibility for the suitability of this information to their

particular situation.