

NORTH STRONG SCIENTIFIC INC. -- BORIC ACID -- 6750-00-408-5898

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

Product ID: BORIC ACID

MSDS Date: 09/22/1986

FSC: 6750

NIIN: 00-408-5898

MSDS Number: BHZGH

=== Responsible Party ===

Company Name: NORTH STRONG SCIENTIFIC INC.

Address: 7322 WESTMORE ROAD

City: ROCKVILLE

State: MD

ZIP: 20850

Country: US

Info Phone Num: 301-762-2121

Emergency Phone Num: 301-762-2121

Preparer's Na

me: DGSC-SSH-HRN

CAGE: 0BSN0

=== Contractor Identification ===

Company Name: NORTH STRONG SCIENTIFIC INC.

Address: 7322 WESTMORE ROAD

Box: City: ROCKVILLE

State: MD

ZIP: 20850

Country: US

Phone: 301-762-2121

CAGE: 0BSN0

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

Ingred Name: BORIC ACID

CAS: 10043-35-3

RTECS #: ED4550000

Fraction by Wt: 100%

OSHA PEL: 15MG/CUM-BORON OXIDE

ACGIH TLV: 10MG/CUM-BORON OXIDE

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

LD50 LC50 M

ixture:LD50 ORAL RAT=2650MG/KG

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

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

Health Hazards Acute and

Chronic:EYE:ACUTE,IRRITATION;CHRONIC,CONJUNCTIVITIS,EDEMA.

SKIN:ACUTE,EXCORIATIONS,FEVER,ANURIA;CHRONIC,ANOREXIA,WEIGHT LOSS,VOMIT,DIARRHEA,RASH,ALOPECIA,CONVULSIONS,ANEMIA.

INHALATION:ACUTE,MUCOUS MEMBRANE I

RRITATION,EXCORIATION,FEVER,ANURIA;CHRONIC:ANOREXIA,WEIGHT LOSS,VOMIT,DIARRHEA,RASH,*SEE SIGNS &SYMPT

OMS OF O'EXPOSURE*

Effects of Overexposure:CONT'D FROM HEALTH

HAZARDS,INHALATION,CHRONIC:ALOPECIA,CONVULSIONS,ANEMIA.INGESTION:NE PHROTOXIC,NAUSEA,HEMATEMESIS,BLOODY DIARRHEA,EPIGASTRIC

PAIN,HEMORRHAGIC GASTRITIS,WEAKNESS,ANOREXIA,LETHARGY,HEAD

ACHE,INSOMNIA;CHRONIC,ANOREXIA,WEIGHT LOSS,ABDOMINAL

DISCOMFORT,NAUSEA,VOMIT,MILD DIARRHEA,GASTRIC ULCER,RASH,RED TONGU

Medical Cond Aggravated by Exposure:ANY MEDICAL CONDITION AFFECTING

SAME ORGANS AS THOSE AFFECTED BY OVEREXPOSU

RE.

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

First Aid:EYES:IMMEDIATELY FLUSH WITH WATER FOR 15-20MIN.SEE DOCTOR IMM;SKIN:REMOVE CONTAMINATED CLOTHING & SHOES,WASH WITH SOAP & WATER.SEE DOCTOR IMM;INHALATION:IMMEDIATELY REMOVE TO FRESH AIR.GIVE CPR/O*2 IF NEEDED.SEE DOCTOR IMM;INGESTION:MAINTAIN RESPIRATION.REMOVE BY IPECAC EMESIS FOLLOWEDBY ACTIVATED CHARCOAL.GASTRIC LAVAGE MAY BE USEFUL.TREAT ANURIA.SEE DOCTOR IMMEDIATELY.

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

Extinguishing Media:DRY CHEMICAL,CO*2,WATER SPRAY,FOAM

Fire Fighting Procedures:DO NOT USE WATER DIRECTLY ON MATERIAL.COOL FIRE EXPOSED CONTAINERS WITH WATER.AVOID BREATHING CORROSIVE DUSTS & FUMES.KEEP UPWIND.MOVE CONT.FROM FIRE IF POSSIBL

Unusual Fire/Explosion Hazard:CORROSIVE DUSTS AND FUMES GENERATED FROM FIRE EXPOSED MATERIAL.

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

Spill Release Procedures:SWE

EP UP & PLACE IN SUITABLE CLEAN, DRY
CONTAINERS FOR LATER DISPOSAL. DO NOT FLUSH WITH WATER. KEEP
UNNECESSARY PEOPLE AWAY.

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

Handling and Storage Precautions: STORE IN COOL, DRY AREA. PROTECT FROM
HEAT, IMPACT, FIRE.

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

Respiratory Protection: CHEMICAL CARTRIDGE RESPIRATOR WITH AN ORGANIC
VAPOR CARTRIDGE WITH A HIGH EFFICIENCY PARTICULATE FILTER & FULL

FACEPIECE, JOINTLY APPROVED BY NIOSH/MSHA.

Ventilation: LOCAL EXHAUST OR GENERAL DILUTION VENTILATION TO KEEP BELOW
TLV.

Protective Gloves: IMPERVIOUS

Eye Protection: DUST-RESISTANT GOGGLES

Other Protective Equipment: IMPERVIOUS CLOTHING & EQUIPMENT TO PREVENT
REPEATED OR PROLONGED SKIN CONTACT.

Work Hygienic Practices: WASH THOROUGHLY AFTER HANDLING. REMOVE & LAUNDER
CONTAMINATED CLOTHING.

Supplemental Safety and Health

MELTING POINT: DECOMPOSES. SIGNS & SYMPTOMS OF OVEREXPOSURE: SEE CASE
HISTORY 88106A FOR MORE INFORMATION. *NOTE* MSDS BUILT BY DGSC-SSH
FROM MATERIAL OF SPECTRUM CHEMICAL, NSN 6750-00-174-5454.

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

Melt/Freeze Pt: M.P/F.P Text: 365F, 165C

Spec Gravity: 1.435

pH: ACID

Solubility in Water: 6.35% @ 86F, 30C

Appearance and Odor: ODORLESS, COLORLESS TRICLINIC CRYSTALS OR WHITE
GRANULAR POWDER.

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

Stability Indicator/Materials to Avoid

d:YES
ACETIC ANHYDRIDE:EXPLOSIVE REACTION ON HEATING;POTASSIUM:EXPLOSIVE REACTION ON IMPACT;IRON:CORROSIVE WHEN MOIST.
Stability Condition to Avoid:HEAT,IMPACT,MOISTURE. MAY BURN BUT DOES NOT IGNITE READILY.
Hazardous Decomposition Products:LOSES WATER AT 212-320F FORMING METABORIC ACID,THEN PYROBORIC ACID & FINALLY BORIC ANHYDRIDE.

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

Waste Disposal Methods:DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE & 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.