

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 02.05.2015**Sodium Tetraborate, Anhydrous****SECTION 1: Identification of the substance/mixture and of the supplier****Product name:** Sodium Tetraborate, Anhydrous**Manufacturer/Supplier Article number:** ST3800**Recommended uses of the product and restrictions on use:** Laboratory**Manufacturer Details:**

AquaPhoenix Scientific, Inc.
 860 Gitts Run Road
 Hanover, PA 17331
 1-717-632-1291

Emergency telephone number:**ChemTel: (24-hour)**

+1(800)255-3924

+1(813)248-0585 (International)

SECTION 2: Hazards identification**Classification of the substance or mixture:****Health hazard**

Reproductive toxicity, category 1B

Reproductive toxicity category 1B.

Hazards Not Otherwise Classified - Combustible Dust.

Signal word: Danger**Hazard statements:**

May damage fertility or the unborn child.

Precautionary statements:

If medical advice is needed have product container or label at hand.

Keep out of reach of children.

Read label before use.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Use personal protective equipment as required.

Do not eat, drink or smoke when using this product.

IF exposed or concerned: Get medical advice/attention.

Store locked up.

Dispose of contents/container.

Other Non-GHS Classification: None**SECTION 3: Composition/information on ingredients****Ingredients:**

Ingredients:		
CAS 1303-96-4	Disodium tetraborate decahydrate	100 %

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Percentages are by weight

SECTION 4: First aid measures**Description of first aid measures****After inhalation:**

Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Seek medical advice if discomfort or irritation persists. If breathing difficult, give oxygen.

After skin contact:

Wash affected area with soap and water. Seek medical advice if discomfort or irritation persists. Flush skin with plenty of soap and water for at least 15 minutes.

After eye contact:

Protect unexposed eye. Rinse or flush exposed eye gently using water for 15-20 minutes. Remove contact lenses, if present and easy to do, and continue rinsing. Immediately get medical assistance.

After swallowing:

Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Seek medical attention if irritation, discomfort or vomiting persists.

Most important symptoms and effects, both acute and delayed:

Headache. Shortness of breath. Irritation. Nausea.

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention provide SDS document to physician. Physician should treat symptomatically. If seeking medical attention, provide SDS document to physician. Physician should treat symptomatically.

SECTION 5: Firefighting measures**Extinguishing media****Suitable extinguishing agents:**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition. Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

Unsuitable extinguishing agents: None**Special hazards arising from the substance or mixture:**

Irritating and toxic gases may be generated by thermal decomposition and combustion. Combustion products may include carbon oxides or other toxic vapors. Thermal decomposition can lead to release of irritating gases and vapors.

Advice for firefighters:**Protective equipment:**

Wear protective eyewear, gloves, and clothing. Use NIOSH-approved respiratory protection/breathing apparatus. Refer to Section 8.

Additional information (precautions):

Avoid contact with skin, eyes and clothing. Move product containers away from fire or keep cool with water spray as a protective measure, where feasible. Use spark-proof tools and explosion-proof equipment. Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Avoid inhaling gases, fumes, dust, mist, vapor and aerosols. Avoid contact with skin, eyes and clothing.

SECTION 6: Accidental release measures

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Normal ventilation is adequate. Wear protective equipment. Use spark-proof tools and explosion-proof equipment. Ensure that air-handling systems are operational. Ensure adequate ventilation.

Environmental precautions:

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13. Should not be released into environment.

Methods and material for containment and cleaning up:

If necessary use trained response staff or contractor. Collect solids in powder form using vacuum with HEPA filter. Sweep up and containerize for disposal. Minimize dust generation. Always obey local regulations.

Reference to other sections: None

SECTION 7: Handling and storage**Precautions for safe handling:**

Wash hands after handling. Avoid contact with skin, eyes and clothing. Do not eat, drink, smoke, or use personal products when handling chemical substances. Minimize dust generation and accumulation.

Conditions for safe storage, including any incompatibilities:

Keep container tightly closed in a cool, dry, well-ventilated area. Protect from freezing and physical damage. Store away from incompatible materials. Keep away from food and beverages. Provide ventilation for containers. Avoid storage near extreme heat, ignition sources or open flame.

SECTION 8: Exposure controls/personal protection**Control parameters:**

1303-96-4, Sodium Tetraborate, Anhydrous, ACGIH TLV TWA 2.0 mg/m³.
1303-96-4, Sodium Tetraborate, Anhydrous, OSHA PEL TWA 10.0 mg/m³.
1303-96-4, Sodium Tetraborate, Anhydrous, NIOSH TWA 5.0 mg/m³.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Normal ventilation is adequate. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use/handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or dusts (total/respirable) below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use under a fume hood.

Respiratory protection:

Not required under normal conditions of use. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved breathing equipment.

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Protection of skin:	Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Use proper glove removal technique without touching outer surface. Avoid skin contact with used gloves. Wear protective clothing.
Eye protection:	Safety glasses with side shields or goggles. Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
General hygienic measures:	Avoid contact with skin, eyes and clothing. Before re-wearing, wash contaminated clothing. Wash hands before breaks and immediately after handling the product. Perform routine housekeeping to prevent dust generation. Wash hands before breaks and at the end of work.

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	White crystals	Explosion limit lower:	Not determined
		Explosion limit upper:	Not determined
Odor:	Odorless	Vapor pressure at 20°C:	Not determined
Odor threshold:	Not determined	Vapor density:	Not determined
pH-value:	9.2 at 10 g/l	Relative density:	1.73 g/cm ³ at 25 °C (77 °F)
Melting/Freezing point:	62 °C (144 °F)	Solubilities:	Material is water soluble.
Boiling point/Boiling range:	Not determined	Partition coefficient (n-octanol/water):	Not determined
Flash point (closed cup):	Not determined	Auto/Self-ignition temperature:	Not determined
Evaporation rate:	Not determined	Decomposition temperature:	Not determined
Flammability (solid, gaseous):	Not determined	Viscosity:	a. Kinematic: Not determined b. Dynamic: Not determined
Density at 20°C:	Not determined		

SECTION 10: Stability and reactivity**Reactivity:**

None under normal processing. Nonreactive under normal conditions.

Chemical stability:

Stable under normal conditions.

Possible hazardous reactions:

None under normal processing.

Conditions to avoid:

Incompatible Materials.

Incompatible materials:

Metal salts, strong acids, and alkaloid salts. Strong bases. Oxidizing agents.

Hazardous decomposition products:

Borane oxides. Boron oxides. Sodium oxides.

SECTION 11: Toxicological information

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LD50 Rabbit 10,000 mg/kg.

Chronic Toxicity: No additional information.**Skin corrosion/irritation:** No additional information.**Serious eye damage/irritation:** No additional information.**Respiratory or skin sensitization:** No additional information.**Carcinogenicity:** No additional information.**Germ cell mutagenicity:** No additional information.**Reproductive Toxicity:**

Presumed human reproductive toxicant.

STOT-single and repeated exposure: No additional information.**Additional toxicological information:**

No additional information.

SECTION 12: Ecological information**Ecotoxicity:**Fish., LC50 - *Carassius auratus* (goldfish) - 178 mg/l - 72 h.Invertebrates, EC50 - *Daphnia magna* (Water flea) - 1,085 - 1,402 mg/l - 48 h.Algae, IC50 - *Desmodesmus subspicatus* (green algae) - 158 mg/l - 96 h.**Persistence and degradability:**

Readily biodegradable.

Bioaccumulative potential:

Not expected to bio accumulate.

Mobility in soil: No additional information.**Other adverse effects:** No additional information.**SECTION 13: Disposal considerations****Waste disposal recommendations:**

Dilute with water and flush to sewer. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Contact a licensed professional waste disposal service to dispose of this material. Dispose of empty containers as unused product. Product or containers must not be disposed with household garbage. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification.

SECTION 14: Transport information**US DOT****UN Number:**

ADR, ADN, DOT, IMDG, IATA

Not Regulated

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Bulk:
RQ (if applicable): None
Proper shipping Name: Not Regulated.
Hazard Class: None
Packing Group: Not Regulated.
Marine Pollutant (if applicable): No additional information.
Comments: None

Non Bulk:
RQ (if applicable): None
Proper shipping Name: Not Regulated.
Hazard Class: None
Packing Group: Not Regulated.
Marine Pollutant (if applicable): No additional information.
Comments: None

SECTION 15: Regulatory information**United States (USA)****SARA Section 311/312 (Specific toxic chemical listings):**

None of the ingredients are listed.

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act) :

1303-96-4 Not Regulated.: not listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

None of the ingredients are listed.

Proposition 65 (California):**Chemicals known to cause cancer:**

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Canada**Canadian Domestic Substances List (DSL) :**

1303-96-4 Not Regulated.: not listed.

SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation

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to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

NFPA: 1-0-0**HMIS:** 1-0-0**GHS Full Text Phrases:** None**Abbreviations and Acronyms:**

IMDG	International Maritime Code for Dangerous Goods.
PNEC.	Predicted No-Effect Concentration (REACH).
CFR	Code of Federal Regulations (USA)
SARA	Superfund Amendments and Reauthorization Act (USA).
RCRA.	Resource Conservation and Recovery Act (USA).
TSCA.	Toxic Substances Control Act (USA).
NPRI	National Pollutant Release Inventory (Canada).
DOT	US Department of Transportation.
IMDG	International Maritime Code for Dangerous Goods.
IATA	International Air Transport Association.
GHS	Globally Harmonized System of Classification and Labelling of Chemicals.
IATA	International Air Transport Association.
ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstracts Service (division of the American Chemical Society).
NFPA	National Fire Protection Association (USA).
HMIS	Hazardous Materials Identification System (USA).
WHMIS	Workplace Hazardous Materials Information System (Canada).
DNEL	Derived No-Effect Level (REACH).