According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 02.02.2018

Sodium Borate, Reagent Grade

SECTION 1: Identification

Product identifier

Product name: Sodium Borate, Reagent Grade Product code: S25537

Recommended use of the product and restriction on use Relevant identified uses: Not determined or not applicable. Uses advised against: Not determined or not applicable. Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer:	Supplier
Manufacturer:	Supplier:

AquaPhoenix Scientific 860 Gitts Run Road	Fisher Science Education 6771 Silver Crest Road
Hanover	Nazareth
PA 17331	PA 18064
(717) 632-1291	800 955-1177

Emergency telephone number: United States

Emergency Telephone No.: 800-255-3924

SECTION 2: Hazard identification

GHS classification:

Eye irritation, category 2A Reproductive toxicity, category 1B

Label elements

Hazard pictograms:



Signal word: Danger

Hazard statements:

H319 Causes serious eye irritation H360 May damage fertility or the unborn child

Precautionary statements:

P264 Wash skin thoroughly after handling P280 Wear protective gloves/protective clothing/eye protection/face protection P201 Obtain special instructions before use P202 Do not handle until all safety precautions have been read and understood P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 02.02.2018

Sodium Borate, Reagent Grade

P308+P313 If exposed or concerned: Get medical advice/attention P405 Store locked up P501 Dispose of contents and container as instructed in Section 13

Hazards not otherwise classified: None

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 1303-96-4	Sodium Borate Decahydrate	100

Additional Information: None

SECTION 4: First-aid measures

Description of first-aid measures

General notes:

Not determined or not available.

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position Maintain an unobstructed airway

After skin contact:

Rinse affected area with soap and water If symptoms develop or persist, seek medical attention

After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes If symptoms develop or persist, seek medical attention Remove contact lens(es) if able to do so during rinsing Seek medical attention if irritation persists or if concerned

After ingestion:

Rinse mouth thoroughly Seek medical attention if irritation, discomfort, or vomiting persists

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Not determined or not available.

Delayed symptoms and effects:

Not determined or not available.

Immediate medical attention and special treatment

Specific treatment:

Not determined or not available.

Notes for the doctor:

Not determined or not available.

SECTION 5: Fire-fighting measures

Extinguishing media

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 02.02.2018

Sodium Borate, Reagent Grade

Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

Unsuitable extinguishing media:

Not determined or not applicable.

Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

Special protective equipment for firefighters:

Wear protective eye wear, gloves and clothing Refer to Section 8

Special precautions:

Avoid inhaling gases, fumes, dust, mist, vapor and aerosols Avoid contact with skin, eyes and clothing

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation Ensure air handling systems are operational Wear protective eye wear, gloves and clothing

Environmental precautions:

Should not be released into the environment Prevent from reaching drains, sewer or waterway

Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing

Reference to other sections:

Not determined or not applicable.

SECTION 7: Handling and storage

Precautions for safe handling:

Do not eat, drink, smoke or use personal products when handling chemical substances. Avoid breathing mist or vapor.

Conditions for safe storage, including any incompatibilities:

Store in a cool, well-ventilated area.

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Country (Legal Basis)	Substance	Identifier	Permissible concentration
Canada	Sodium Borate Decahydrate		Alberta OELs - 8-Hour TWA Exposure Limit: 1 mg/m³
	Sodium Borate Decahydrate		Alberta OELs - 15-minute STEL: 3 ppm
	Sodium Borate Decahydrate	1303-96-4	British Columbia OELs - 8-Hour TWA Exposure Value: 2 mg/m ³

Occupational Exposure limit values:

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 02.02.2018

Sodium Borate, Reagent Grade

Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Sodium Borate Decahydrate	1303-96-4	British Columbia OELs -15-minute STEL: 6 mg/m ³
	Sodium Borate Decahydrate	1303-96-4	Manitoba OELs - 8-Hour Exposure Limit (TLV-TWA): 2 mg/m ³
	Sodium Borate Decahydrate	1303-96-4	Manitoba OELs - 15-minute STEL: 6 mg/m ³
	Sodium Borate Decahydrate	1303-96-4	Ontario OELs - 8-Hour TWA Exposure Value (TWA): 2 mg/m ³
	Sodium Borate Decahydrate	1303-96-4	Ontario OELs - 15-minute STEL (STEL): 6 mg/m ³
	Sodium Borate Decahydrate	1303-96-4	Quebec OELs - 8-Hour TWA Exposure Value: 5 mg/m ³ (Sodium tetraborate, decahydrate)
	Sodium Borate Decahydrate	1303-96-4	Quebec OELs - 8-Hour TWA Exposure Value: 1 mg/m ³ (Sodium tetraborate, anhydrous)
	Sodium Borate Decahydrate	1303-96-4	Saskatchewan OELs - 8 Hour Average Contamination Limit: 2 mg/m ³ (Inhalable fraction)
	Sodium Borate Decahydrate	1303-96-4	Saskatchewan OELs -15 minute average contamination limit: 6 mg/m ³ (Inhalable fraction)

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

Not determined or not applicable.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Personal protection equipment

Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

Select glove material impermeable and resistant to the substance.

Respiratory protection:

When necessary, use NIOSH-approved breathing equipment.

General hygienic measures:

Wash hands before breaks and at the end of work. Avoid contact with skin, eyes and clothing.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance (physical state, color):	White solid
Odor:	Odorless
Odor threshold:	Not determined or not available.

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 02.02.2018

Page 5 of 8

Sodium Borate, Reagent Grade

pH-value:	9.5 (5% aq. sol.)
Melting/Freezing point:	741°C
Boiling point/range:	1575°C
Flash point:	Not determined or not available.
Evaporation rate:	Not determined or not available.
Flammability (solid, gaseous):	Not determined or not available.
Explosion limit upper:	Not determined or not available.
Explosion limit lower:	Not determined or not available.
Vapor pressure:	Not determined or not available.
Vapor density:	Not determined or not available.
Density:	Not determined or not available.
Relative density:	1.73 g/cm ³
Solubilities:	Water soluble.
Partition coefficient (n-octanol/water):	Not determined or not available.
Auto/Self-ignition temperature:	Not determined or not available.
Decomposition temperature:	Not determined or not available.
Dynamic viscosity:	Not determined or not available.
Kinematic viscosity:	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

Other information

SECTION 10: Stability and reactivity

Reactivity:

Does not react under normal conditions of use and storage.

Chemical stability:

Stable under normal conditions of use and storage.

Possibility of hazardous reactions:

Thermal decomposition.

Conditions to avoid:

Store away from oxidizing agents, strong acids or bases. Dust generation.

Incompatible materials:

Strong acids. Strong bases. Alkaloid salts. metallic salts.

Hazardous decomposition products:

Oxides of boron.

SECTION 11: Toxicological information

Acute toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Skin corrosion/irritation

Assessment: Based on available data, the classification criteria are not met.

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 02.02.2018

Sodium Borate, Reagent Grade

Product data: No data available. Substance data: No data available.

Serious eye damage/irritation

Assessment: Causes serious eye irritation

Product data: No data available.

Substance data:

Name	Result
Sodium Borate Decahydrate	Causes serious eye irritation.

Respiratory or skin sensitization

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

International Agency for Research on Cancer (IARC): None of the ingredients are listed. **National Toxicology Program (NTP):** None of the ingredients are listed.

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Reproductive toxicity

Assessment: May damage fertility or the unborn child

Product data: No data available.

Substance data:

Name	Result
Sodium Borate Decahydrate	May damage fertility or the unborn child.

Specific target organ toxicity (single exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Specific target organ toxicity (repeated exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Information on likely routes of exposure: No data available.

Symptoms related to the physical, chemical and toxicological characteristics: No data available.

Other information: No data available.

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 02.02.2018

Sodium Borate, Reagent Grade

SECTION 12: Ecological information

Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met. Product data: No data available. Substance data: No data available.

Chronic (long-term) toxicity

Product data: No data available.

Substance data: No data available.

Persistence and degradability

Product data: No data available. **Substance data:** No data available.

Bioaccumulative potential

Product data: No data available. **Substance data:** No data available.

Mobility in soil

Product data: No data available. Substance data: No data available.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11)

SECTION 14: Transport information

Canadian Transportation of Dangerous Goods (TDG)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 02.02.2018

Sodium Borate, Reagent Grade

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

SECTION 15: Regulatory information

Canada regulations

Domestic substances list (DSL):

1303-96-4	Sodium Borate Decahydrate	Listed

Non-domestic substances list (NDSL): Not determined.

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

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 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: 2-0-0

HMIS: 2-0-0-X

Initial preparation date: 02.02.2018

End of Safety Data Sheet