According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 04.03.2017

Revision date: 02.02.2018

Wood Borate Reagent # 2 SS

SECTION 1: Identification

Product identifier

Product name: Wood Borate Reagent # 2 SS Product code: WB1002SS

Recommended use of the product and restriction on use

Relevant identified uses: Laboratory Chemicals Uses advised against: Not determined or not applicable. Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

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

Emergency telephone number: United States ChemTel 800-255-3924 1-813-248-0585

SECTION 2: Hazard identification

GHS classification:

Flammable liquids, category 2 Serious eye damage, category 1 Skin corrosion, category 1A Acute toxicity (inhalation), category 4

Label elements

Hazard pictograms:



Signal word: Danger

Hazard statements:

H225 Highly flammable liquid and vapor

- H318 Causes serious eye damage
- H314 Causes severe skin burns and eye damage
- H332 Harmful if inhaled

Precautionary statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 04.03.2017

Revision date: 02.02.2018

Wood Borate Reagent # 2 SS

P233 Keep container tightly closed P240 Ground/bond container and receiving equipment P241 Use explosion-proof electrical/ventilating/light/equipment P242 Use only non-sparking tools P243 Take precautionary measures against static discharge P280 Wear protective gloves/protective clothing/eye protection/face protection P260 Do not breathe dust/fume/gas/mist/vapors/spray P264 Wash skin thoroughly after handling P271 Use only outdoors or in a well-ventilated area P370+P378 In case of fire: Use agents recommended in section 5 for extinction P305+P351+P338+P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. P321 Specific treatment (see supplemental first aid instructions on this label). P363 Wash contaminated clothing before reuse P304+P340+P310 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician P301+P330+P331+P310 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician. P303+P361+P353+P310 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician. P403+P235 Store in a well ventilated place. Keep cool 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: 69-72-7	Salicylic acid	<6
CAS number: 7647-01-0	Hydrochloric acid	<20
CAS number: 64-17-5	Ethanol	<80

Additional Information: None

SECTION 4: First-aid measures

Description of first-aid measures

General notes:

Not determined or not available.

After inhalation:

Move exposed individual to fresh air Loosen clothing as necessary and position individual in a comfortable position Maintain an unobstructed airway Call a POISON CONTROL CENTER or seek medical attention

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 04.03.2017

Revision date: 02.02.2018

Wood Borate Reagent # 2 SS

Immediately call a POISON CONTROL CENTER or seek medical attention

After skin contact:

Immediately remove all contaminated clothing Wash affected area with soap and water Seek medical attention if symptoms develop or persist Call a POISON CONTROL CENTER or seek medical attention if you feel unwell Immediately call a POISON CONTROL CENTER or seek medical attention

After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes Remove contact lens(es) if able to do so during rinsing Immediately call a POISON CONTROL CENTER or seek medical attention

After ingestion:

Immediately call a POISON CONTROL CENTER or seek medical attention Do not induce vomiting

Rinse mouth and then drink plenty of water

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

Suitable extinguishing media:

Use Water (fog only), dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam

Unsuitable extinguishing media:

Not determined or not applicable.

Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors Vapors can flow to distant ignition sources and flashback Liquid is volatile and may generate an explosive atmosphere

Special protective equipment for firefighters:

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

Special precautions:

Shut off sources of ignition Carbon monoxide and carbon dioxide may form upon combustion Heating causes a rise in pressure, risk of bursting and combustion

SECTION 6: Accidental release measures

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 04.03.2017

Revision date: 02.02.2018

Wood Borate Reagent # 2 SS

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation

Ensure air handling systems are operational Wear protective eye wear, gloves and clothing Beware of vapors accumulating to form explosive concentrations Vapors can accumulate in low areas

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 Use spark-proof tools and explosion-proof equipment Absorb with non-combustible liquid-binding material (sand, diatomaceous earth (clay), acid binders, universal binders) Dispose of contents / container in accordance with local regulations

Reference to other sections:

Not determined or not applicable.

SECTION 7: Handling and storage

Precautions for safe handling:

Use only with adequate ventilation. Avoid breathing mist or vapor. Do not eat, drink, smoke or use personal products when handling chemical substances. Take precautionary measures against electrostatic discharges. Use only non-sparking tools.

Conditions for safe storage, including any incompatibilities:

Keep container tightly sealed. Protect from freezing and physical damage. Store in a cool, well-ventilated area. Store away from all ignition sources (open flames, hot surfaces, direct sunlight, spark sources).

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Country (Legal Basis)	Substance	Identifier	Permissible concentration
ACGIH	Hydrochloric acid	7647-01-0	ACGIH TLV C 2.0 ppm
	Ethanol	64-17-5	ACGIH TLV TWA 1,000 ppm
	Ethanol	64-17-5	ACGIH TLV STEL 1,000 ppm
United States (OSHA)	Hydrochloric acid	7647-01-0	OSHA PEL C 5.0 ppm
	Hydrochloric acid	7647-01-0	OSHA PEL C 7.0 mg/m ³
	Ethanol	64-17-5	OSHA PEL TWA 1,000 ppm
	Ethanol	64-17-5	OSHA PEL TWA 1,900 mg/m ³
NIOSH	Hydrochloric acid	7647-01-0	NIOSH REL C 5.0 ppm

Occupational Exposure limit values:

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 04.03.2017 Revision date: 02.02.2018

Wood Borate Reagent # 2 SS

Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Hydrochloric acid	7647-01-0	NIOSH REL C 7.0 mg/m ³
	Ethanol	64-17-5	NIOSH REL TWA 1,000 ppm
	Ethanol	64-17-5	NIOSH REL TWA 1,900 mg/m ³

Biological limit values:

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

Information on monitoring procedures:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. Biological monitoring may also be appropriate for some substances.

Appropriate engineering controls:

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

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. Use explosion-proof ventilation equipment.

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.

Wear appropriate clothing to prevent any possibility of skin contact.

Respiratory protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

General hygienic measures:

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

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance (physical state, color):	Liquid
Odor:	Not determined or not available.
Odor threshold:	Not determined or not available.
pH-value:	Not determined or not available.
Melting/Freezing point:	Not determined or not available.
Boiling point/range:	78 °C
Flash point:	16 °C
Evaporation rate:	Not determined or not available.
Flammability (solid, gaseous):	Not determined or not available.

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 04.03.2017 Revision date: 02.02.2018 Page 6 of 10

Wood Borate Reagent # 2 SS

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:	Not determined or not available.
Solubilities:	Not determined or not available.
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:

None under normal conditions of use and storage.

Conditions to avoid:

Excess heat, ignition sources.

Incompatible materials:

None known.

Hazardous decomposition products:

None known.

SECTION 11: Toxicological information

Acute toxicity

Assessment: Harmful if inhaled **Product data:** No data available.

Substance data:

Name	Route	Result
Hydrochloric acid	inhalation	LC50 - Mouse - 1,108 ppm / 1h
Salicylic acid	oral	LD50 Oral - Rat - male - 891 mg/kg

Skin corrosion/irritation

Assessment: Causes severe skin burns and eye damage **Product data:** No data available.

Substance data:

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 04.03.2017

Revision date: 02.02.2018

Page 7 of 10

Wood Borate Reagent # 2 SS

Name	Result
Hydrochloric acid	Causes severe skin burns and eye damage.

Serious eye damage/irritation

Assessment: Causes serious eye damage

Product data: No data available.

Substance data:

Name	Result
Salicylic acid	Causes serious eye damage

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):

Name	Classification
Hydrochloric acid	Group 3 - Not classifiable as to its carcinogenicity to humans
Ethanol	Group 1 - Carcinogenic to humans

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

Product data: No data available.

Substance data: No data available.

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.

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 04.03.2017

Revision date: 02.02.2018

Wood Borate Reagent # 2 SS

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.

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

SECTION 14: Transport information

Canadian Transportation of Dangerous Goods (TDG)

UN number	UN2924
UN proper shipping name	Flammable liquid, corrosive, N.O.S. Ethanol and Hydrochloric acid
UN transport hazard class(es)	3 (8)
Packing group	II
Environmental hazards	None
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number	UN2924

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 04.03.2017

Revision date: 02.02.2018

Page 9 of 10

Wood Borate Reagent # 2 SS

UN proper shipping name	Flammable liquid, corrosive, N.O.S. Ethanol and Hydrochloric acid
UN transport hazard class(es)	3 (8)
Packing group	Ш
Environmental hazards	None
Special precautions for user	None

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

UN number	UN2924		
UN proper shipping name	Flammable liquid, corrosive, N.O.S. Ethanol and Hydrochloric acid		
UN transport hazard class(es)	3 (8)		
Packing group	П		
Environmental hazards	None		
Special precautions for user	None		

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code		
Bulk Name	None	
Ship type	None	
Pollution category	None	

SECTION 15: Regulatory information

Canada regulations

Domestic substances list (DSL):

7647-01-0	Hydrochloric acid	Listed
69-72-7	Salicylic acid	Listed
64-17-5	Ethanol	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 the Canadian Hazardous Products Regulations and WHMIS 2015. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 04.03.2017 Revision date: 02.02.2018

Wood Borate Reagent # 2 SS

NFPA: 2-3-0 HMIS: 2-3-0 Initial preparation date: 04.03.2017 Revision date: 02.02.2018

End of Safety Data Sheet

Page 10 of 10