Safety Data Sheet

Section 1: Product and Company Identification

1.1 Product Identifiers:
Product Names: ABRAXIS® Saxitoxin Standard, ABRAXIS® $[^{15}N]_7$ Saxitoxin Standard, ABRAXIS® Saxitoxin (PSP) MDL Solutions, ABRAXIS® Saxitoxin (PSP) MDL Solutions (CAAS)
Product Codes: 300642, 300956, 300710, 300710C
1.2 Identified Use: Positive control for determination of Saxitoxin in samples. **Restrictions on Use:** For research use only.
1.3 Company: Gold Standard Diagnostics**,** 124 Railroad Drive**,** Warminster, PA 18974 USA**,** info.abraxis@us.goldstandarddiagnostics.com +1(215) 357-3911, FAX+1(215) 357-5232
1.4 Emergency Telephone Number: +1(215) 357-3911

Section 2: Hazard(s) Identification

2.1 Classification of the mixture:
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) Flammable liquids (Category 2), H225 Highly flammable liquid and vaporEye irritation (Category 2A), H319 Causes serious eye irritation
HMIS Rating: Health hazard: 2, Chronic Health Hazard: *, Flammability: 3, Physical Hazard 0NFPA Rating: Health hazard: 2, Fire Hazard: 3, Reactivity Hazard: 0
Classification of the substance:
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)Eye irritation (Category 2A), H319 Causes serious eye irritation
HMIS Rating: Health hazard: 2, Chronic Health Hazard: *, Flammability: 0, Physical Hazard 0NFPA Rating: Health hazard: 2, Fire Hazard: 0, Reactivity Hazard: 0
2.2 GHS Label elements, including precautionary statements:
Pictogram(s) (mixture)

Signal word: Danger Hazard statement(s):
H225 Highly flammable liquid and vapor.H319 Causes serious eye irritation.
Precautionary statement(s):
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/eye protection/face protection.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present. Continue rinsing.P337 + P313 If eye irritation persists: Get medical advice/attention.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. P403 + P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container to an approved waste disposal plant.Pictogram(s) (substance)

Signal word: Danger Hazard statement(s):
H319 Causes serious eye irritation.Precautionary statement(s):
P233 Keep container tightly closed.
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/eye protection/face protection.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present. Continue rinsing.P337 + P313 If eye irritation persists: Get medical advice/attention.
P403 + P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container to an approved waste disposal plant.
2.3 Hazards not otherwise classified (HNOC) or not covered by GHS: None known.
2.4 Unknown acute toxicity: None known.

Section 3: Composition / Information on Ingredients

3.1 Substances:
Name and Synonym(s): $[^{15}N]_7$ Saxitoxin dihydrochloride — Formula: $C_{10}H_{17}{}^{15}N_7O_4$
Molecular weight: 306.2 g/mol — CAS No.: 35554-08-6 (Native Form)
Percentage: less than or equal to 100 %
Classification: Acute Toxicity 2, H300 + H310 + H330
3.2 Mixtures: Mixture of the hazardous substance(s) listed below, with nonhazardous additions.
Name and Synonym(s): Saxitoxin dihydrochloride — Formula: $C_{10}H_{19}N_7O_4Cl_2$; $C_{10}H_{17}{}^{15}N7O4$

Molecular weight: 372 g/mol CAS No.: 7732-18-5
Classification: Acute Toxicity 2, H300 + H310 + H330
Percentage in mixture: 0.0000001-0.0000005 %
Hazardous component(s):
Name and Synonym(s): Ethyl alcohol, EtOH, Ethanol, Absolute alcohol Formula: C_2H_6O
Molecular weight: 46.07 g/mol CAS No.: 64-17-5 EC-No.: 200-578-6
Classification: Flammable Liquid 2, Eye Irritation 2A; H225, H319Percentage in Mixture: ~100 %
For full text of H-Statements mentioned in this Section, see Section 2.

Section 4: First Aid Measures

4.1 Description of first aid measures: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact: Wash off with soap and plenty of water. Consult a physician.
In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
4.2 Most important symptoms and effects, both acute and delayed: The most important known symptoms and effects are described in thelabelling (see section 2.2) and/or in section 11
4.3 Indication of any immediate medical attention and special treatment needed: No data available. Treat symptomatically.

Section 5: Fire-fighting Measures

5.1 Suitable extinguishing media: Water spray, alcohol-resistant foam, dry chemical or carbon dioxide
5.2 Special hazards arising from the substance or mixture: Carbon oxides
5.3 Advice for firefighters: Wear self-contained breathing apparatus for fire-fighting if necessary.
5.4 Further information: Use water spray to cool unopened containers.

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures: Use personal protective equipment (see section 8). Avoid dust formation. Avoid breathing vapors, mist, dust, or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safeareas.
6.2 Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
6.3 Methods and materials for containment and cleaning up: Contain spillage. Solids (if applicable): Pick up and arrange disposal without creating dust. Sweep up and shovel. Liquids (if applicable): Collect with an electrically protected vacuum cleaner or by wet-brushing. Keep insuitable, closed containers for disposal.
6.4 Reference to other sections: For information on safe handling see section 7.For information on personal protection see section 8.
For information on disposal see section 13.

Section 7: Handling and Storage

7.1 Precautions for safe handling: See section 2. Avoid inhalation of vapors or mist, and avoid contact with skin and eyes. Wear appropriate personal protective equipment. Use explosion-proof equipment. Keep away from sources of ignition. Do not eat, drink, or smoke in work area. Take measures to prevent the buildup of electrostatic charge.
7.2 Precautions for safe storage: Keep container(s) tightly closed in a dry, well-ventilated place. Protect from physical damage. Opened containers must be carefully resealed and kept upright to prevent leakage. See label or product insert for appropriate storage temperature and additional specific information. Hygroscopic. Storage class (TRGS 510): Flammable liquids.
7.3 Specific end use(s): Other than use(s) specified in section 1, no other uses are stipulated.

Section 8: Exposure Controls / Personal Protection

8.1 Control parameters:
Component(s) with workplace control parameters
Ethanol, CAS No. 64-17-5

Value	Control parameters	Basis
TWA	1,000.000000 ppm	USA. ACGIH Threshold Limit Values (TLV)
Upper Respiratory Tract irritation Confirmed animal carcinogen with unknown relevance to humans		

TWA	1,000 ppm; 1,900 mg/m³	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
The value in mg/m³ is approximate.		
TWA	1,000 ppm; 1,900 mg/m³	USA. Occupational Exposure Limits; (OSHA) - Table Z-1 Limits for Air Contaminants
The value in mg/m³ is approximate.		
TWA	1,000 ppm; 1,900 mg/m³	USA. NIOSH Recommended Exposure Limits
The value in mg/m³ is approximate.		
STEL	1,000.000000 ppm	USA. ACGIH Threshold Limit Values (TLV)
Upper Respiratory Tract irritation Confirmed animal carcinogen with unknown relevance to humans		

8.2 Exposure controls:
Appropriate engineering controls: Face shield and safety glasses. Provide adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Keep away from food and beverages.
Personal protective equipment
Eye protection: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin protection: Handle with chemical resistant gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicablelaws and good laboratory practices. Wash and dry hands.
Respiratory protection: Use a chemical fume hood or approved respiratory protection equipment.
Body protection: Flame retardant antistatic, lightweight, protective clothing to prevent skin exposure.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties of substance/mixtureAppearance: Liquid (PN300642); Solid (PN300956)
Odor: No data available **Odor Threshold:** No data available
pH: No data available
Melting point/freezing point: No data available **Initial boiling point and boiling range:** No data available **Flash point:** No data available
Evaporation rate: No data available **Flammability (solid, gas):** No data available
Upper/lower flammability or explosive limits No data available
Vapor pressure: No data available **Vapor density:** No data available **Relative density:** No data available
Water solubility: No data available **Partition coefficient: n-octanol/water:** No data available
Auto-ignition temperature: Not applicable **Decomposition temperature:** No data available **Viscosity:** No data available
Explosive properties: No data available **Oxidizing properties:** No data available
9.2 Other information: No data available

Section 10: Stability and Reactivity

10.1 Reactivity: No data available
10.2 Chemical stability: Stable under recommended storage conditions.
10.3 Possibility of hazardous reactions: Vapors may form explosive mixture with air (PN300642).
10.4 Conditions to avoid: Keep away from open flame, hot surfaces, heat sources, and sources of ignition (PN300642).
10.5 Incompatible materials: Alkali metals, oxidizing agents, peroxides
10.6 Hazardous decomposition products: No data available. In the event of fire: see section 5.

Section 11: Toxicological Information

11.1 Information on toxicological effects
To the best of our knowledge, the chemical, physical, and toxicological properties of this product have not been thoroughly investigated.
Acute toxicity (Saxitoxin, CAS No. 35554-08-6)**:**
Inhalation No data available **Ingestion** No data available **Skin contact** No data available
Eye contact No data available **Respiratory or skin sensitization** No data available **Aspiration hazard** No data available
LD50 Intraperitoneal No data available
Acute toxicity (Ethanol, CAS No. 64-17-5)**:**
Inhalation LC50 Inhalation - Rat - 4 h - 30,000 mg/l
Ingestion LD50 Oral - Rat - 10,470 mg/kg
Skin contact LD50 Dermal - Rabbit - 15,800 mg/kg; Skin – Rabbit Result: No skin irritation - 24 h (OECD Test Guideline 404)
Eye contact Eyes – Rabbit Result: Moderate eye irritation (OECD Test Guideline 405)

Respiratory or skin sensitization No data available
Aspiration hazard No data
available**Mutagenicity** No data available
Carcinogenicity (Ethanol, CAS No. 64-17-5):
Carcinogenicity - Mouse – Oral; Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Liver: Tumors. Blood: Lymphomas including Hodgkin's disease.
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed humancarcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Teratogenicity: No data available
Reproductive/fertility toxicity (Ethanol, CAS No. 64-17-5)**:** Reproductive toxicity - Human - female – Oral; Effects on Newborn: Apgar score(human only). Effects on Newborn: Other neonatal measures or effects. Effects on Newborn: Drug dependence.
Specific target organ toxicity, single exposure No data available
Specific target organ toxicity, repeated exposure: No data available
Additional information (Saxitoxin, CAS No. 35554-08-6): RTECS: Not available. Stomach - Irregularities - Based on Human Evidence. (Ethanol,CAS No. 64-17-5): RTECS: KQ6300000 Central nervous system depression, narcosis, damage to the heart. Stomach - Irregularities - Based on Human Evidence

Section 12: Ecological Information

12.1 Toxicity: (Ethanol, CAS No. 64-17-5) Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 14,200 mg/l - 96 h; Toxicity to daphnia and other aquatic invertebrates LC50 - *Ceriodaphnia dubia* (water flea) - 5,012 mg/l - 48 h; NOEC - *Daphnia magna* (Water flea) - 9.6 mg/l - 9 d; Toxicity to algae EC50 - *Chlorella vulgaris* (Fresh water algae) - 275 mg/l - 72 h (OECD Test Guideline 201)
12.2 Persistence and degradability: No data available
12.3 Bioaccumulative potential: No data available
12.4 Mobility in soil: No data available
12.5 Results of PBT and vPvB assessment: No data available
12.6 Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13: Disposal Considerations

13.1 Waste treatment methods
Product: All waste must be handled and disposed according to local, state, and federal regulations. Avoid disposing large volumes in sewer.(Ethanol, CAS No. 64-17-5): Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as thismaterial is highly flammable.
Contaminated packaging: All waste must be handled and disposed according to local, state, and federal regulations.Refer to sections 7 and 8 for safe handling guidance.

Section 14: Transport Information

DOT, Land Transport ADR/RID (cross-border), Maritime Transport IMDG, Air Transport ICAO-TI and IATA-DGR
UN Number: 3316 **UN Proper shipping name:** Chemical Kit, (contains Ethanol) **Transport hazard class(es)**: 9
Packing group: III **Environmental hazard:** See section 12 **Bulk transport:** Excepted/Limited quantity
Special considerations: See section 7 for handling

Section 15: Regulatory Information

EU Regulations, Hazard Symbol(s): Ethanol: F (Flammable)
Risk and Safety Phrases:
Ethanol: R11 Highly flammable. S16 Keep away from sources of ignition - No smoking. S33 Take precautionary measures against static discharges. S7 Keep container tightly closed. S9 Keep container in a well-ventilated place.
SARA Title III, Section 302 Components: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA Title III, Section 313 Components: This material does not contain any chemical components with known CAS numbers that exceed the threshold (DeMinimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards: Ethanol, CAS No. 64-17-5: Fire Hazard, Acute Health Hazard, Chronic Health Hazard
State Right-to-Know
Massachusetts: Ethanol, CAS No. 64-17-5Pennsylvania: Ethanol, CAS No. 64-17-5 New Jersey: Ethanol, CAS No. 64-17-5
California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16: Other information

This information is based on our present knowledge. While Gold Standard Diagnostics believes that the data contained herein are factual and the opinions expressed represent a best effort to present accurate information, the data are not to be taken as a warranty or representation for which Gold Standard Diagnostics assumes legal responsibility. The information shall not be taken as being all-inclusive and is to be used only as a guide. The data are offered solely for the user's consideration, investigation, and verification. These suggestions should not be confused with eitherstate, municipal, or insurance requirements, or with national safety codes and constitute no warranty. Any use of these data and informationmust be determined by the user to be in accordance with applicable federal, state, and local regulations.

All materials and mixtures may present unknown hazards and should be used with caution. Since Gold Standard Diagnostics cannot control the methods, volumes, or conditions of use of this product, Gold Standard Diagnostics shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. An individual technically qualified to handle potentially hazardous chemicals must supervise the use of this material. This product is sold for research use only. It is not for any human or animal therapeutic or clinical diagnostic use.

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