

Safety Data Sheet

Section 1: Product and Company Identification

1.1 Product Identifiers:

Product Name: 7-epi-Cylindrospermopsin, [15N5]-7-epi-Cylindrospermopsin Standards

Product Code: 300651, 300506

1.2 Identified Use: Positive control for determination of Cylindrospermopsin in samples. **Restrictions on Use:** For research use only.

1.3 Company: Abraxis, Inc., 124 Railroad Drive, Warminster, PA 18974 USA, info@abraxiskits.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 substance:

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Oral (Category 2), H300 Fatal if swallowed

Germ Cell Mutagenicity (Category 2) Suspected of causing genetic defects

Specific target organ toxicity - single exposure (Category 1)

HMIS Rating: Health hazard: 4, Chronic Health Hazard: *, Flammability: 0, Physical Hazard 0

NFPA Rating: Health hazard: 4, Fire Hazard: 0, Reactivity Hazard: 0

2.2 GHS Label elements, including precautionary statements:

Pictogram(s)



Signal word: Danger

Hazard statement(s):

H330: Fatal if inhaled.

H335: May cause respiratory irritation.

H300 + H310 Fatal if swallowed or in contact with skin

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Precautionary statement(s):

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P307+311 IF EXPOSED: Call a POISON CENTER or doctor/physician.

P308+313 IF exposed or concerned: Get medical attention/advice.

P330 Rinse mouth.

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:

Names and Synonym(s): 7-epi-Cylindrospermopsin; [15N5] 7-epi-Cylindrospermopsin

Formulae: $C_{15}H_{21}N_5O_7S$; $C_{15}H_{21}^{15}N_5O_7S$ Molecular weights: 415.4 g/mol; 420.4 g/mol

CAS No.:

Percentage: less than or equal to 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. Take victim immediately to hospital. 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 the labelling (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. **Unsuitable Extinguishing Media:** A solid water stream may be inefficient.

5.2 Special hazards arising from the substance or mixture: No data available

5.3 Advice for firefighters: Wear self-contained breathing apparatus for fire-fighting if necessary, and full protective gear to prevent contact with skin and eyes.

5.4 Further information: No data available

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. Evacuate personnel to safe areas.

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): Absorb with non-combustible liquid-binding material (sand, earth, diatomite, vermiculite). Keep in suitable, 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 dust, vapors, or mist, and avoid contact with skin and eyes. Wear appropriate personal protective equipment. Do not eat, drink, or smoke in work area.

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.

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

Contains no substances with occupational exposure limit values.

8.2 Exposure controls:

Appropriate engineering controls: 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 applicable laws and good laboratory practices. Wash and dry hands.

Respiratory protection: 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. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Body protection: Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

9.1 Information on basic physical and chemical properties of substance

Appearance: Solid
pH: No data available
Initial boiling point and boiling range: No data available
Evaporation rate: No data available
Upper/lower flammability or explosive limits: No data available
Vapor density: No data available
Water solubility: Yes
Auto-ignition temperature: Not applicable
Viscosity: No data available
9.2 Other information: No data available

Odor: No data available
Melting point/freezing point: No data available
Flash point: No data available
Flammability (solid, gas): No data available
Vapor pressure: No data available
Relative density: No data available
Partition coefficient: n-octanol/water: No data available
Decomposition temperature: No data available
Explosive properties: No data available
Oxidizing properties: 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: No data available
10.4 Conditions to avoid: No data available
10.5 Incompatible materials: No data available
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:

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 - Mouse: 2100 µg/kg

Mutagenicity: No data available

Carcinogenicity: No data available **Teratogenicity:** No data available **Reproductive/fertility toxicity:** No data available

Specific target organ toxicity, single exposure: No data available

Specific target organ toxicity, repeated exposure: Investigated as a reproductive effector.

Additional information: RTECS: UV9104310.

Section 12: Ecological Information

12.1 Toxicity: No data available
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: Do not allow product to reach ground water, water bodies or sewage system, even in small quantities.

Section 13: Disposal Considerations

13.1 Waste treatment methods

Product: Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. All waste must be handled and disposed according to local, state, and federal regulations.

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: 2811 **UN Proper shipping name:** Toxic solids, organic, n.o.s. (Cylindrospermopsin)

Transport hazard class(es): 6.1—POISON **Packing group:** II **IMDG EMS No:** F-A, S-A; Not a marine pollutant

Special considerations: Transport in accordance with local, state, and federal regulations. See section 7 for handling

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 (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards: No data available

State Right-to-Know

Massachusetts: No data available

Pennsylvania: No data available

New Jersey: No data available

California: 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 Abraxis, Inc. 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 Abraxis, Inc. 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 either state, municipal, or insurance requirements, or with national safety codes and constitute no warranty. Any use of these data and information must 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 Abraxis, Inc. cannot control the methods, volumes, or conditions of use of this product, Abraxis, Inc. 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.

Date this SDS was prepared: 9/19/2018

Version: 2

Changes from previous version: Section 11 clarified.