Safety Data Sheet

Section 1: Product and Company Identification

1.1 Product Identifiers:
Product Name: Microcystins/Nodularins (Serum), ELISA Kit
Product Code: 522031

1.2 Identified Use: Determination of Microcystins/Nodularins 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 mixture:
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 0
NFPA Rating: Health hazard: 2, Fire Hazard: 0, Reactivity Hazard: 0

2.2 GHS Label elements, including precautionary statements:
Pictogram(s)

Signal word: Warning
Hazard statement(s):
H319 Causes serious eye irritation.
Precautionary statement(s):
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/eye protection/face protection.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice/attention.

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

3.2 Mixtures: Mixture of the hazardous substance(s) listed below, with nonhazardous additions.
Hazardous component(s):
Name and Synonym(s): Calcium chloride
Formula: CaCl₂ Molecular weight: 110.98 g/mol CAS No.: 10043-52-4 EC-No.: 233-140-8
Classification: Eye Irritation 2A; H319
Percentage in Mixture: Trade Secret / CBI
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: 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
5.2 Special hazards arising from the substance or mixture: Hydrogen chloride gas, Calcium oxide
5.3 **Advice for firefighters:** Wear self-contained breathing apparatus for fire-fighting if necessary.

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.

6.2 **Environmental precautions:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

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): Soak up with inert absorbent material and dispose of as hazardous waste. 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 contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. 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. Moisture sensitive.

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:** Safety glasses with side-shields. 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:** For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Body protection:** Lightweight, protective clothing to prevent skin exposure. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### Section 9: Physical and Chemical Properties

9.1 **Information on basic physical and chemical properties of mixture**

**Appearance:** Liquid

**Odor:** Characteristic

**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:** No data available
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: No data available
10.4 Conditions to avoid: Exposure to moisture may affect product quality.
10.5 Incompatible materials: Strong acids, borane/boron oxides, zinc, calcium oxide, methyl vinyl ether. Calcium chloride is attacked by bromine trifluoride.
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 (Calcium chloride, CAS No. 10043-52-4):
- Inhalation No data available
- Ingestion LD50 Oral - rat - 2,301 mg/kg (OECD Test Guideline 401)
- Skin contact Skin – rabbit. Result: No skin irritation
- 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:
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen 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 (Calcium chloride, CAS No. 10043-52-4): Rat – Unscheduled DNA synthesis

Reproductive/fertility toxicity: No data available
Specific target organ toxicity, single exposure No data available
Specific target organ toxicity, repeated exposure: No data available
Additional information (Calcium chloride, CAS No. 10043-52-4) RTECS: EV9800000 No data available.

Section 12: Ecological Information

12.1 Toxicity (Calcium chloride, CAS No. 10043-52-4): Toxicity to fish LC50 - Lepomis macrochirus - 10,650 mg/l - 96 h; Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 2,400 mg/l - 48 h (OECD Test Guideline 202)
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: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
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, IMDG, IATA: Not dangerous goods.

Section 15: Regulatory Information

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: Calcium chloride, CAS No. 10043-52-4: Acute Health Hazard

State Right-to-Know
Massachusetts: No components are subject to the Massachusetts Right to Know Act.
Pennsylvania: Calcium chloride, CAS No. 10043-52-4
New Jersey: Calcium chloride, CAS No. 10043-52-4
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 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: 5/20/2016
Version: 2
Changes from previous version: Abraxis, LLC changed to Abraxis, Inc.