

Latest revision date: November 2022

Revision: 1

SDS prepared by: Amplyus

SECTION 1 — IDENTIFICATION

Product name: SeeGreen™ Tabs

Catalog or product number: RG-1500-20, -21

Product use: This product is for education and research use only

Supplier:

Amplyus LLC

1770 Massachusetts Avenue, Suite 167

Cambridge, MA 02140

Phone: 1-781-990-8727 (emergency number during USA East Coast business hours)

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SECTION 2 — HAZARDS IDENTIFICATION

2.1 Classification according to EC Directives 67/548 / EEC (DSD) and 1999/45 / EC (DPD):

H360FD Reproductive Toxicity (Category 1B)

Specific target organ toxicity - single exposure (Category 3),

H335 Respiratory system

For the full text of the H-Statements mentioned in this Section, see Section 16.

T Toxic R60, R61

Xi Irritant R36/38

For the full text of the R-phrases mentioned in this Section, see Section 15.

2.2 Classification according to Regulation (EC) No 1272/2008 (CLP):

H315 Skin irritation (Category 2)

H319 Serious eye irritation (Category 2)

For the full text of the H-Statements mentioned in this Section, see Section 15.

Label elements, Labelling

Pictogram



Danger

Signal word

Hazard statement(s)

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H360FD May damage fertility. May damage the unborn child.

Precautionary statement(s)

P201 Obtain special instructions before use.

P261 Avoid breathing dust.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present, and easy to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Get medical advice/attention.

Supplemental Hazard Statements None

Restricted to professional users.



According to European Directive 67/548/EEC as amended.

Hazard symbol(s) T Toxic

R-phrases(s)

- R60 May impair fertility
- R61 May cause harm to the unborn child.
- R36/37/38 Irritating to eyes, respiratory system and skin.

S-phrases(s)

- S53 Avoid exposure - obtain special instructions before use.
- S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Restricted to professional users

2.3 Other hazards:

This mixture does not contain any substances that are assessed to be a PBT or a vPvB

2.4 Additional hazards for humans and the environment:

Possible hazardous physicochemical effects: Unknown

Possible adverse effects on humans and possible symptoms: No data available

Possible harmful effects: No data available

SECTION 3 — COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization: Powder solution with inorganic and organic components.

Components

Ingredients	%	CAS Number
Dimethyl sulfoxide	<1%	67-68-5
Agarose	54%	912-36-6
Tris-Borate EDTA (TBE) buffer	46%	
<i>Tris (hydroxymethyl aminomethane)</i>	<i>25-35% of TBE</i>	<i>77-86-1</i>
<i>Ethylenediaminetetraacetic acid (EDTA)</i>	<i>~2% of TBE</i>	<i>60-00-4</i>
<i>Boric Acid</i>	<i>15-20% of TBE</i>	<i>10043-35-3</i>
SeeGreen™ Nucleic Acid Stain*	<1%	n/a

*No components need to be disclosed according to the applicable regulations.

SECTION 4 — FIRST AID MEASURES

General information: If skin irritation or other symptoms persist, consult a physician. Show this safety data sheet to the doctor in attendance. Remove contaminated clothing and shoes, carefully clean before reuse.

Eye contact: Remove contact lenses. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Skin contact: Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

Inhalation: Move to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

Ingestion: Never give anything to an unconscious person. Do not induce vomiting. Rinse the mouth, spit out the fluid and drink plenty of water. Get medical attention if symptoms occur.

SECTION 5 — FIRE-FIGHTING MEASURES

Conditions of flammability: Not flammable

Suitable extinguishing media: Dry chemical, CO₂, water spray, or alcohol resistant foam.

Special protective equipment for firefighters: Wear self-contained breathing apparatus for fire-fighting if necessary

Hazardous combustion products: Carbon dioxide, carbon monoxide, sulfur oxides

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Personal precautions: Prevent skin/eye contact. Wear personal protective equipment.

Environmental precautions: Dilute with plenty of water. Do not allow to enter sewers/ surface or ground water. For disposal see section 13.

Methods and materials for containment and cleaning up: Soak up with absorbent material and dispose. Clean contaminated surfaces with water. Keep in suitable container for disposal.

SECTION 7 — HANDLING AND STORAGE

Precautions for safe handling: Wear personal protective equipment. Avoid contact with skin and eyes. Avoid ingestion and inhalation. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use. Provide appropriate exhaust ventilation at places where dust might form. For precautions see section 2.

Conditions for safe storage: Recommended storage temperature 4-30°C, protected from light. Always keep in containers of the same material as the original.

Incompatible products: N/A

SECTION 8 — EXPOSURE CONTROL / PERSONAL PROTECTION

Control parameters: Contains no relevant quantities of substances with occupational exposure limit values that have to be monitored at the workplace according to TRGS 900.

Engineering controls: Handle in accordance with Good Laboratory Practice. Wash hands before breaks and at the end of workday.

Personal protective measures: Wash hands thoroughly after handling. Do Not eat, drink or smoke when handling this product.

Personal protective equipment:

- **Skin protection:** Appropriate protective clothing with long sleeves. Handle with suitable protective gloves. Gloves must be inspected prior to use. Damaged and worn protective gloves should be replaced immediately. 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. Protective gloves must satisfy specifications of EU Directive 89/686/EEC and the standard EN 374:

Nitrile rubber	0.35 mm or greater thickness
Latex	0.35 mm or greater thickness
- **Eye protection:** safety glasses with side shields conforming to EN166 U
- **Respiratory protection:** In case of very poor, insufficient ventilation wear respirators and components tested and approved under appropriate government standards. Half masks according to EN 140 or full masks according to EN 136, with filters according to EN 143-P1.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Form: White powder in tablet form

Color: White solid, faint orange/yellow when dissolved

Odor: No data available

Odor threshold: No data available

pH: 8.5 at 25 °C

Melting point/freezing point: No data available

Boiling point: No data available

Flash point: No data available

Evaporation rate: No data available

Ignition temperature: No data available

Autoignition temperature: No data available

Lower explosion limit: No data available

Upper explosion limit: No data available

Vapor pressure: No data available

Vapor density: No data available

Relative density (water = 1): No data available

Water solubility: Soluble in water

Viscosity: No data available

SECTION 10 — STABILITY AND REACTIVITY

Chemical stability: Stable under recommended storage conditions.

Incompatible materials to avoid: Strong acids or bases, strong oxidizers, extreme temperature or pressure conditions.

Hazardous decomposition products: Carbon oxides.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute toxicity LD/LC50 values:

Inhalation: Aerosols may cause allergic type reactions in sensitized individuals.

Ingestion: Repeated ingestion or excessive dosage may cause irritation of the gastrointestinal tract.

Skin and eye contact: The product can irritate the skin and eyes.

Parameter	Value	Species
Dimethyl sulfoxide LD ₅₀ oral	28500 mg/kg	Rat
Tris LD ₅₀ oral	5900 mg/kg	Rat
Boric acid LD ₅₀ oral	2000 mg/kg	Rat
Boric acid LD ₅₀ dermal	0.16 mg/L	Rabbit
Boric acid LD ₅₀ inhalation	0.16 mg/L	Rat

Skin corrosion/irritation:

Skin corrosion/irritation Irritant effect

Serious eye damage/eye irritation Irritant effect

After inhalation Slight irritations

Respiratory or skin sensitization: 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.

Reproductive toxicity: No toxicological data are available on the components of the product.

Additional toxicological information: The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations:

Product is suspected to cause damage to fertility. CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) Repr. 1A. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Liver - Irregularities - Based on Human Evidence (Boric acid)

General remarks: When used and handled according to instructions, the product does not cause harmful effects according to our experience and current information.

SECTION 12 — ECOLOGICAL INFORMATION

Toxicity: No data available

Persistence and degradability: No data available

Bioaccumulative potential: No data available

Mobility in soil: No data available

PBT assessment / vPvB assessment: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Other adverse effects: Harmful to aquatic life

General remarks: When used and handled according to instructions, the product does not cause harmful effects according to our experience and current information.

SECTION 13 — DISPOSAL CONSIDERATIONS

Product: Dispose of waste in accordance with applicable national, regional, or local regulations. Do not allow product to reach ground water, water course, or sewage system.

Contaminated packaging: Dispose of packaging in accordance with applicable national, regional, or local regulations. Packaging which is not completely emptied must be disposed of in the form as determined by the local waste disposal authority.

SECTION 14 — TRANSPORT INFORMATION

This substance is considered to be Non-hazardous for transport.

SECTION 15 — REGULATORY INFORMATION

EU Regulations:

Chemical safety assessment according to Regulation (EC) No 1907/2006: Substance safety assessments (CSA) according to Article 14 (1) of Regulation (EC) No 1907/2006 (REACH) for the components of the product are neither banned nor restricted

Classification and labeling according to directives 67/548 / EEC (DSD) and 1999/45 / EC (DPD): Not a hazardous substance or mixture, see section 2

Classification and labeling according to Regulation (EC) No 1272/2008 (CLP): Hazardous substance or mixture, see section 2

Pictograms:



Signal word: Danger to Regulation (EC) No. 1272/2008

H-Statements: Hazardous substance or mixture according to Regulation (EC) No.1272/2008

Full text of H-Statements referred to under sections 2 and 3.

Eye Irrit.	Eye irritation
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H360FD	May damage fertility. May damage the unborn child
Repr.	Reproductive toxicity
Skin Irrit.	Skin irritation
STOT SE	Specific target organ toxicity - single exposure
Full text of R-phrases referred to under sections 2 and 3	
T	Toxic
R36/37/38	Irritating to eyes, respiratory system and skin.
R60	May impair fertility.
R61	May cause harm to the unborn child.
Xi	Irritant
Repr. Cat. 2	Toxic to Reproduction Category 2

Special labeling of certain preparations: Neither banned nor restricted

Approvals and / or restrictions of use: Neither banned nor restricted.

Information on Directive 1999/13 / EC (VOC Directive) on the limitation of VOC emissions: Neither banned nor restricted

SARA 302/304 (40CFR355.30/40CFR355.40): This material does not contain any components with a section 302 EHS TPQ or a section 304 EHS RQ

SARA 313: Substance not listed

SARA 311/312: Chronic health hazard

California Proposition 65: Substance not listed

Massachusetts right to know: Substance not listed

SECTION 16 — OTHER INFORMATION

This information is based on our present knowledge and shall be used only as a guide. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. Amplyus LLC is not held liable for any damage resulting from handling or from contact with the above mentioned product