MATERIAL SAFETY DATA SHEET

VIVANTIS TECHNOLOGIES SDN BHD
REVONGEN CORPORATION CENTER

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SECTION 1: CHEMICAL IDENTIFICATION

Catalogue Number: SD1103, SD1103-S
Product Name: Viva qGreen II Fluorescent Dye 20X in Water (equivalent to EvaGreen® Dye)

Intended Use:
For research use only. Not for use in diagnostic procedures.

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SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	EC No.	%	Formula	Molecular Weight
Double distilled water	7732-18-5	231-791-2	>99.9%	H2O	18
EvaGreen® dye	Not applicable	Not applicable	<0.1%	Not applicable	Not applicable

SECTION 3: HAZARDS IDENTIFICATION

The substance not yet fully tested. To our knowledge, the hazards of this material have not been thoroughly investigated. We recommend handling all chemicals with caution. This product is classified and labeled in accordance with Directive 1999/45/EC:

Indication of danger
Not hazardous

R-phrase(s)
None

SECTION 4: FIRST-AID MEASURES

The product is potentially harmful; avoid prolonged or repeated exposure. Wash thoroughly after handling.
In case of eye contact, wash thoroughly with water for up to 15 minutes. Seek medical assistance if there is persistent irritation.
In case of skin contact, wash with excess water. Seek medical assistance if irritation is persistent.
In case of inhalation, move individual to fresh air. Give artificial respiration if not breathing. Seek medical assistance if there are problems.
In case of ingestion, never give anything by mouth to an unconscious person. Rinse mouth with water provided the person is conscious. Seek medical assistance if there are problems.

SECTION 5: FIRE FIGHTING MEASURES

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Use water spray, carbon dioxide, foam or dry chemical to extinguish the fire.
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

For personal protection, avoid inhaling this product and contacting the substance with hands. Avoid contact with skin, eyes and clothing by using personal protective equipment as needed.
For environmental precautions, prevent further leakage or spillage if safe to do so for containment. Minimize entry of material into sewers and drainage systems; dispose all waste into a chemical waste container in accordance with applicable laws.
For cleaning up, absorb on inert absorbent material. Pick up and transfer to properly label closed containers for disposal according to local regulations. Wash spill site and ventilate area after picking up is completed.

SECTION 7: HANDLING AND STORAGE

Handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes by using personal protective equipment as needed.
Normal measures for preventive fire protection.

Storage

Keep containers tightly closed in a dry, cool, dark and well-ventilated place to protect product quality. Desiccation required.
Store at 4°C for daily use or frequent use; store at -20°C for long term use.
Protect material from long-term exposure to light; may be exposed to light for short periods of time.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ACGIH/OSHA Permissible Exposure Limit Data: Not determined

Respiratory protection	No special protective equipment required. However, irritation may experience if exceeded exposure limits. Use process enclosures, local exhaust ventilation, or other engineering controls as needed.
Eye/Face protection	Wear tightly fitted safety goggles with side-shields. Where contact with the eyes is likely, use chemical goggles.
Hand Protection	Use protective gloves as needed. Gloves must be inspected prior to use. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Skin and body protection	Wear body covering protective clothing as needed to minimize contact with clothing and skin.

Use engineering measures such as showers, eyewash stations and ventilation system.
Handle in accordance with good industrial hygiene and safety practice.
No special environmental precautions required for environmental exposure controls.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Light orange
Physical state:	Liquid
Odor:	Not determined
pH:	Neutral
Melting point:	Not determined
Boiling point:	Not determined
Flash point:	Not determined
Solubility in water:	High
Vapor pressure:	Not determined

SECTION 10: STABILITY AND REACTIVITY

Stable under recommended storage conditions.

Thermal Decomposition:	No decomposition if used according to specifications.
Hazardous decomposition products:	No dangerous decomposition products identified.
Hazardous polymerization:	Hazardous polymerization does not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity
Fathead minnows – LC50 >750 mg/l – 96 hrs exposure (with 100% survival)

Potential Health Hazards

Ingestion	No information available
Inhalation	No information available
Skin	No information available
Eyes	No information available

Carcinogenicity:	Not listed by NTP, IARC or OSHA
Sensitization:	No information available
Reproductive toxicity:	No information available

Mutagenicity – Bacterial Reverse Mutation Screening Assay (Ames assay)

Negative with or without S9 metabolic activation on two histidine dependent Salmonella typhimurium strains (TA98 and TA1537)

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.
RTECS: None known

SECTION 12: ECOLOGICAL INFORMATION
Ecotoxicity effects:
Contains no substances known to be hazardous to the environment or not degradable in wastewater treatment plants.

Aquatic toxicity
Test organism Fathead minnow
Test method EPA600/4-85/013
Result Not hazardous or toxic to aquatic life according to CCR Title 22 Hazardous Waste Characterization guidelines

Mobility: Completely soluble.
Biodegradation: Inherently biodegradable.
Bioaccumulative potential: Material does not bioaccumulate.

To the best of our knowledge, the environmental impact of this product has not been fully investigated.

SECTION 13: DISPOSAL CONSIDERATIONS
The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. Do not dispose product directly into sewage. The packaging of this product and its container must be disposed of in according to approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable federal, state and local regulations.

SECTION 14: TRANSPORT INFORMATION

Hazard Class:	No information available.
Subsidiary Class:	No information available.
Identification Number:	No information available.
Packing Group:	Not classified.
Proper Shipping Name (Technical Name):	Not applicable.

SECTION 15: REGULATORY INFORMATION

This product is classified and labeled in accordance with Directive 1999/45/EC:

Indication of danger
Not hazardous

R-phrase(s)
None

S-phrase(s)
None

SECTION 16: OTHER INFORMATION

The information contained in this MSDS relates only to the material(s) designed and does not relate to use(s) in combination with any other material, process(es) and /or chemical reaction(s). Vivantis Technologies Sdn. Bhd. provides this information in good faith, from sources believed to be accurate; however, Vivantis assumes no liability for its accuracy or completeness, and thus shall not be held liable for any damage resulting from handling or from contact with the above product.

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