



VALENT BIOSCIENCES LLC

Safety Data Sheet

Transit® 500

SECTION 1: Identification

Product identifier

Product name Transit® 500

Product number FBS 1015

Recommended use of the chemical and restrictions on use

Biostimulant, manufacturing ingredient

Supplier's details

Name Valent BioSciences LLC
Address 1910 Innovation Way, Suite 100
Libertyville, IL 60048
USA

Telephone 847-968-4700

Emergency phone number(s) CHEMTREC 1-800-424-9300

SECTION 2: Hazard identification

Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200)

Not a hazardous substance or mixture.

GHS label elements, including precautionary statements

Not a hazardous substance or mixture.

Other hazards which do not result in classification

Not a hazardous substance or mixture.

SECTION 3: Composition/information on ingredients

Mixtures

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1. Complexed Organic Matter

Concentration	0.88 - 0.92 % (weight)
EC no.	840-567-9
CAS no.	2247629-85-0
REACH registration	01-2120833164-61-0000

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice	Contact with eyes or skin should be washed off with plenty of water. Seek medical attention if irritation occurs and persists.
If inhaled	Move to fresh air: Obtain medical attention immediately if breathing becomes difficult.
In case of skin contact	Wash off with plenty of water. If prolonged contact occurs, rinse thoroughly with soap and water.
In case of eye contact	Cautiously flush eyes with plenty of water for at least 15 minutes. Remove contact lenses. Obtain medical attention if irritation occurs and persists.
If swallowed	Do not induce vomiting. Obtain medical attention if you feel unwell. If vomiting occurs naturally, have person lean forward to reduce the risk of aspiration. Never give anything by mouth to an unconscious person.

Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of immediate medical attention and special treatment needed, if necessary

No data available

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Use extinguishing media appropriate for surrounding fire.

Specific hazards arising from the chemical

Fire hazard: Not flammable

Hazardous combustion products: Product is non-reactive under normal conditions.

Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment. For personal protection see section 8.

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Environmental precautions

Avoid uncontrolled release into the environment.

Methods and materials for containment and cleaning up

Soak up with inert absorbent material (e.g., sand, silica gel). Keep in suitable, closed containers for disposal.

SECTION 7: Handling and storage

Precautions for safe handling

Ensure adequate ventilation. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes, and clothing. Avoid ingestion and inhalation. For precautions see section 2.2.

Conditions for safe storage, including any incompatibilities

Keep out of reach of children. Do not contaminate water, food, or feed by storage or disposal. Do not store below 5 °C.

SECTION 8: Exposure controls/personal protection

Control parameters

1. Complexed Organic Matter (CAS: 2247629-85-0 EC: 840-567-9)

Appropriate engineering controls

Avoid contact with skin, eyes, and clothing. Wash hands before breaks and immediately after handling the product.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face 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 protective gloves that are impervious to the chemical substance. 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

In case of insufficient ventilation, wear A NIOSH certified respirator with APF>10, in accordance with OSHA respirator regulations found in 29 CFR 1910.134.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)	Liquid, Dark brown/black
Odor	Earthy
Odor threshold	No data available.
pH	6.5-7.5
Melting point/freezing point	0 °C
Initial boiling point and boiling range	100 °C
Flash point	>95 °C (ASTM D93)
Evaporation rate	No data available.
Flammability (solid, gas)	Non-flammable.

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Upper/lower flammability limits	No data available.
Upper/lower explosive limits	No data available.
Vapor pressure	No data available.
Vapor density	No data available.
Relative density	1.00-1.03 @20°C
Solubility(ies)	Complete in Water
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	Not explosive.
Oxidizing properties	No data available.

Other safety information

No data available.

SECTION 10: Stability and reactivity

Reactivity

None under normal use conditions.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal use conditions.

Conditions to avoid

No data available.

Incompatible materials

No data available.

Hazardous decomposition products

No data available.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Complexed Organic Matter

LD50 Oral - Rat - >5000 mg/kg

LD50 Dermal - Rat - >5050 mg/kg

LC50 Inhalation - >2.16 mg/L air - 4 hours

Skin corrosion/irritation

No erythema or edema were observed at any time on rabbits via EPA OPPTS 870.2500. No other signs of irritation were observed during the study. Assigned to Toxicity Category IV.

Eye damage/irritation

Non-irritant. Toxicity categories completed on rabbits via EPA OPPTS 870.2400 assigned the substance to Toxicity Category IV.

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Respiratory or skin sensitization

Studies on guinea pigs via EPA OPPTS 870.2600 produced no irritation in the test animals or in the naive control animals after the challenge treatment, and therefore did not elicit a sensitizing reaction.

Germ cell mutagenicity

In vitro mutagenicity tests were negative for genotoxicity and cytotoxicity.

Carcinogenicity

No data available.

Reproductive toxicity

No data available.

Summary of evaluation of the CMR properties

No data available.

STOT-single exposure

No data available.

STOT-repeated exposure

No data available.

Aspiration hazard

No data available.

Additional information

No data available.

SECTION 12: Ecological information

Toxicity

Aquatic Organisms Toxicity:

Rainbow Trout (*Oncorhynchus mykiss*) Acute LC50: >1,000 mg/L (EPA OPPTS 850.1075)

Daphnia magna Acute EC50: >1,000 mg/L (EPA OPPTS 850.1010)

Aquatic algae (freshwater alga, *Pseudokirchneriella subcapitata*): OECD 201, EC50 > 100 mg/L test substance, NOEC: 100 mg/L test substance. Test substance did not inhibit algal growth.

Avian Organisms Toxicity:

Bobwhite Quail (*Colinus virginianus*) Acute LD50: >72 mg a.i./kg body weight, NOEL for mortality and adverse effects: >72 mg a.i./kg body weight (EPA OPPTS 850.2100)

Bobwhite Quail (*Colinus virginianus*) Dietary LC50: >1080 mg a.i./kg feed (201.6 mg a.i./kg body wt./day), NOEC: >1080 mg a.i./kg feed (EPA OPPTS 850.2200)

*Based on tests conducted with 0.90% TGA1

Persistence and degradability

No data available on product

Bioaccumulative potential

Complexed Organic Matter, the active ingredient, is derived from natural organic matter. Accordingly, based on studies conducted on its major components, it is biodegradable with a soil DT50 likely in the range of +/- 25-30 days and is unlikely to persist under either aerobic or anaerobic aquatic conditions.

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Mobility in soil

No data available

Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects

No data available

SECTION 13: Disposal considerations

Disposal of the product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Disposal of contaminated packaging

Dispose of in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

SECTION 15: Regulatory information

Safety, health, and environmental regulations specific for the product in question

California Prop. 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

EU Regulations

Registered under the REACH regulation managed by the ECHA (registration number 01-2120833164-61-0000).

Toxic Substances Control Act (TSCA) Inventory

This chemical substance complies with all applicable rules or orders under TSCA.

HMIS Rating

Health	0
Flammability	0
Physical hazard	0
Personal protection	

SECTION 16: Other information

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Further information/disclaimer

The directions for use of this product are believed to be adequate and must be followed carefully. The use of this product is beyond the control of the manufacturer, and, therefore, to the extent consistent with applicable law, no warranty, representation, or guarantee of any kind, expressed or implied, is made as to the effects of such use or any results obtained if not used in accordance with printed directions and established safe practice or if unusual or extraordinary weather conditions occur. To the extent consistent with applicable law, the buyer's exclusive remedy and manufacturer's or seller's exclusive liability in tort or otherwise, shall be limited, at the manufacturer's option, to replacement of, or the repayment of the purchase price for, the quantity of product with respect to which damages are claimed.

The information and recommendations contained herein are based upon data believed to be correct. However, there is no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein.