

# SAFETY DATA SHEET



## BALEXIA™ Biostimulant

Version	Revision Date:	SDS Number:	Date of last issue: 09.11.2023
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### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

**Product name** BALEXIA™ Biostimulant

**Other means of identification**

**Product code** 50002888

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Sub-  
stance/Mixture : Crop nutrition

Recommended restrictions  
on use : Use as recommended by the label.

#### 1.3 Details of the supplier of the safety data sheet

**Supplier Address**

FMC Chemicals (Pty) Ltd  
Company Registration No.: 1988/001451/07  
West End Office Park, Building C  
Cnr. West Ave & Hall Street  
Centurion  
0014  
South Africa

E-mail address: SDS-Info@fmc.com .

#### 1.4 Emergency telephone number

For leak, fire, spill or accident emergencies, call:  
South Africa: 080-001-4676 (CHEMTREC)

Medical emergency:  
For any emergency or poisoning contact: Griffon Poison Infor-  
mation Centre (24 hrs) - +27-(0)-82-446-8946

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### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

**Classification (REGULATION (EC) No 1272/2008)**

Not a hazardous substance or mixture.

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### 2.2 Label elements

#### Labelling (REGULATION (EC) No 1272/2008)

No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

#### Additional Labelling

EUH210 Safety data sheet available on request.

EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

### 2.3 Other hazards

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.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

#### Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
No hazardous ingredients :			
Bacillus paralicheniformis (formerly licheniformis) strain RT1184	Not Assigned		2.2

For explanation of abbreviations see section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General advice : Do not leave the victim unattended.

Protection of first-aiders : First Aid responders should pay attention to self-protection and use the recommended protective clothing  
Avoid inhalation, ingestion and contact with skin and eyes.  
If potential for exposure exists refer to Section 8 for specific personal protective equipment.

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|-------------------------|---|
| If inhaled              | : Move to fresh air.<br>If experiencing any discomfort, immediately remove from exposure. Get medical attention if discomfort does not disappear.<br>If unconscious, place in recovery position and seek medical advice.          |
| In case of skin contact | : Wash off with soap and water.<br>If symptoms persist, call a physician.<br>Wash contaminated clothing before re-use.<br>Get medical attention if irritation develops and persists.  |
| In case of eye contact  | : Flush eyes with water as a precaution.<br>Remove contact lenses.<br>Protect unharmed eye.<br>Keep eye wide open while rinsing.<br>If eye irritation persists, consult a specialist.   |
| If swallowed            | : Keep respiratory tract clear.<br>Do not give milk or alcoholic beverages.<br>Never give anything by mouth to an unconscious person.<br>If symptoms persist, call a physician.<br>Do not induce vomiting without medical advice. |

### 4.2 Most important symptoms and effects, both acute and delayed

None known.

### 4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

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## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- |                                |   |
|--------------------------------|---|
| Suitable extinguishing media   | : Dry chemical, CO <sub>2</sub> , water spray or regular foam.<br>Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Unsuitable extinguishing media | : Do not spread spilled material with high-pressure water streams.<br>High volume water jet   |

### 5.2 Special hazards arising from the substance or mixture

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|-------------------------------|---|
| Hazardous combustion products | : Fire may produce irritating, corrosive and/or toxic gases.<br>Carbon oxides<br>Sulphur oxides |
|-------------------------------|---|

### 5.3 Advice for firefighters

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| Special protective equipment for firefighters | : Firefighters should wear protective clothing and self-contained breathing apparatus. |
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- Specific extinguishing methods : Remove undamaged containers from fire area if it is safe to do so.  
Use a water spray to cool fully closed containers.
- Further information : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
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**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

- Personal precautions : Use personal protective equipment.  
Ensure adequate ventilation.  
If it can be safely done, stop the leak.  
Do not touch or walk through the spilled material.  
Never return spills in original containers for re-use.  
Mark the contaminated area with signs and prevent access to unauthorized personnel.  
Only qualified personnel equipped with suitable protective equipment may intervene.  
For disposal considerations see section 13.

**6.2 Environmental precautions**

- Environmental precautions : Prevent further leakage or spillage if safe to do so.  
Prevent product from entering drains.  
If the product contaminates rivers and lakes or drains inform respective authorities.

**6.3 Methods and material for containment and cleaning up**

- Methods for cleaning up : Never return spills in original containers for re-use.  
Collect as much of the spill as possible with a suitable absorbent material.  
Pick up and transfer to properly labelled containers.  
Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**

See sections: 7, 8, 11, 12 and 13.

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**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

- Advice on safe handling : For personal protection see section 8.  
Avoid formation of respirable particles.  
Dispose of rinse water in accordance with local and national regulations.
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Smoking, eating and drinking should be prohibited in the application area.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Hygiene measures : Avoid contact with skin, eyes and clothing. Do not inhale aerosol. When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Electrical installations / working materials must comply with the technological safety standards.

Further information on storage conditions : The product is stable under normal conditions of warehouse storage. Protect from heat and direct sunlight. Store in closed, labelled containers. The storage room should be constructed of incombustible material, closed, dry, ventilated and with impermeable floor, without access of unauthorised persons or children. The room should only be used for storage of chemicals. Food, drink, feed and seed should not be present. A hand wash station should be available.

Further information on storage stability : No decomposition if stored and applied as directed.

### 7.3 Specific end use(s)

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure Limits

Contains no substances with occupational exposure limit values.

#### Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006

Substance name	Environmental Compartment	Value
1,2,3-Propanetricarboxylic acid, 2-hydroxy-, trisodium salt, dihydrate	Fresh water	0.44 mg/l
	Marine water	0.044 mg/l
	Sewage treatment plant	1000 mg/l
	Fresh water sediment	34.6 mg/kg
	Marine sediment	34.6 mg/kg

### 8.2 Exposure controls

#### Personal protective equipment

Eye/face protection : Eye wash bottle with pure water  
Tightly fitting safety goggles

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Hand protection	
Material	: Wear chemical resistant gloves, such as barrier laminate, butyl rubber or nitrile rubber.
Remarks	: The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Skin and body protection	: Impervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Respiratory protection	: In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.
Protective measures	: Plan first aid action before beginning work with this product. Always have on hand a first-aid kit, together with proper instructions. Wear suitable protective equipment. When using do not eat, drink or smoke.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state	: liquid
Colour	: tan
Odour	: Fermented
Odour Threshold	: not determined
pH	: 5.5 - 8.5 Concentration: 1 %
Melting point/freezing point	: not determined
Boiling point/boiling range	: not determined
Flash point	: > 100 °C
Evaporation rate	: No data available
Upper explosion limit / Upper flammability limit	: not determined
Lower explosion limit / Lower flammability limit	: not determined
Vapour pressure	: not determined
Relative vapour density	: not determined
Relative density	:
Density	: 1.16 g/cm3
Solubility(ies)	
Water solubility	: Miscible
Partition coefficient: n-octanol/water	: Not available for this mixture.
Auto-ignition temperature	: No data available
Decomposition temperature	: not determined

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Viscosity	
Viscosity, dynamic	: 500 - 2,000 mPa,s
Viscosity, kinematic	: not determined
Explosive properties	:
	Not explosive
Oxidizing properties	: Non-oxidizing

### 9.2 Other information

Flammability (liquids)	: Not expected to be ignitable
Molecular weight	: Not applicable
Particle size	: Not applicable
Self-ignition	: not auto-flammable

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No decomposition if stored and applied as directed.

### 10.2 Chemical stability

No decomposition if stored and applied as directed.

### 10.3 Possibility of hazardous reactions

Hazardous reactions	: No decomposition if stored and applied as directed.
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### 10.4 Conditions to avoid

Conditions to avoid	: Avoid formation of aerosol. Protect from frost, heat and sunlight. Heating of the product will produce harmful and irritant vapours.
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### 10.5 Incompatible materials

### 10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

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## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Based on available data, the classification criteria are not met.

#### Product:

Acute oral toxicity	: LD50 Oral (Rat): > 2,000 mg/kg
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Acute inhalation toxicity	: LC50 (Rat): > 5 mg/l Exposure time: 4 h Test atmosphere: dust/mist
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Acute dermal toxicity	: LD50 Dermal (Rat): > 2,000 mg/kg
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### Components:

#### **Bacillus paralicheniformis (formerly licheniformis) strain RTI184:**

Acute oral toxicity	:	Assessment: The substance or mixture has no acute oral toxicity
Acute inhalation toxicity	:	Assessment: The substance or mixture has no acute inhalation toxicity
Acute dermal toxicity	:	Assessment: The substance or mixture has no acute dermal toxicity

#### **Skin corrosion/irritation**

Based on available data, the classification criteria are not met.

### Product:

Assessment	:	Not classified as irritant
Result	:	No skin irritation

### Components:

#### **Bacillus paralicheniformis (formerly licheniformis) strain RTI184:**

Remarks	:	Not expected to be irritating to skin.
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#### **Serious eye damage/eye irritation**

Based on available data, the classification criteria are not met.

### Product:

Assessment	:	Not classified as irritant
Result	:	No eye irritation

### Components:

#### **Bacillus paralicheniformis (formerly licheniformis) strain RTI184:**

Remarks	:	Not expected to be irritating to eyes.
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#### **Respiratory or skin sensitisation**

##### **Skin sensitisation**

Based on available data, the classification criteria are not met.

##### **Respiratory sensitisation**

Based on available data, the classification criteria are not met.

### Product:

Assessment	:	Not a skin sensitizer.
Result	:	Substance is not considered to be potential skin sensitizer.

#### **Germ cell mutagenicity**

Based on available data, the classification criteria are not met.



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### **Product:**

Germ cell mutagenicity- Assessment : Contains no ingredient listed as a mutagen

### **Carcinogenicity**

Based on available data, the classification criteria are not met.

### **Product:**

Carcinogenicity - Assessment : Contains no ingredient listed as a carcinogen

### **Reproductive toxicity**

Based on available data, the classification criteria are not met.

### **Product:**

Reproductive toxicity - Assessment : Contains no ingredient listed as toxic to reproduction

### **STOT - single exposure**

Based on available data, the classification criteria are not met.

### **Product:**

Assessment : The substance or mixture is not classified as specific target organ toxicant, single exposure.

### **STOT - repeated exposure**

Based on available data, the classification criteria are not met.

### **Product:**

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

### **Aspiration toxicity**

Based on available data, the classification criteria are not met.

### **Product:**

No aspiration toxicity classification

### **Further information**

### **Product:**

Remarks : The product contains biologically active material. Hazards to human health which would require classification are not expected, but it is recommended to handle the product with care and to avoid unnecessary exposure.

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**SECTION 12: Ecological information****12.1 Toxicity****Product:****Ecotoxicology Assessment**

- Acute aquatic toxicity : The product is not expected to be toxic to fish, plants, algae, aquatic invertebrates, birds, mammals, insects and soil micro- and macroorganisms at a level which would require classification.
- Chronic aquatic toxicity : The product is not expected to be toxic to fish, plants, algae, aquatic invertebrates, birds, mammals, insects and soil micro- and macroorganisms at a level which would require classification.

**Components:****Bacillus paralicheniformis (formerly licheniformis) strain RTI184:****Ecotoxicology Assessment**

- Acute aquatic toxicity : This product has no known ecotoxicological effects.
- Chronic aquatic toxicity : This product has no known ecotoxicological effects.

**12.2 Persistence and degradability****Product:**

- Biodegradability : Remarks: Not readily biodegradable.

**12.3 Bioaccumulative potential****Product:**

- Bioaccumulation : Remarks: Bioaccumulation is unlikely.

**12.4 Mobility in soil****Product:**

- Distribution among environmental compartments : Remarks: The product is not expected to be mobile in soils.

**12.5 Results of PBT and vPvB assessment****Product:**

- 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.

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### 12.6 Other adverse effects

#### Product:

Endocrine disrupting potential : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Additional ecological information : No data available

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## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Product : Do not dispose of waste into sewer.  
Do not contaminate ponds, waterways or ditches with chemical or used container.  
Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.  
Do not re-use empty containers.  
Packaging that is not properly emptied must be disposed of as the unused product.  
Empty containers should be taken to an approved waste handling site for recycling or disposal.

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## SECTION 14: Transport information

### 14.1 UN number

UNRTDG : Not regulated as a dangerous good  
IMDG : Not regulated as a dangerous good  
IATA : Not regulated as a dangerous good

### 14.2 UN proper shipping name

UNRTDG : Not regulated as a dangerous good  
IMDG : Not regulated as a dangerous good  
IATA : Not regulated as a dangerous good

### 14.3 Transport hazard class(es)

UNRTDG : Not regulated as a dangerous good  
IMDG : Not regulated as a dangerous good  
IATA : Not regulated as a dangerous good

### 14.4 Packing group

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**UNRTDG** : Not regulated as a dangerous good

**IMDG** : Not regulated as a dangerous good

**IATA (Cargo)** : Not regulated as a dangerous good

**IATA (Passenger)** : Not regulated as a dangerous good

### 14.5 Environmental hazards

Not regulated as a dangerous good

### 14.6 Special precautions for user

Remarks : Not classified as dangerous in the meaning of transport regulations.

### 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

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## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### The components of this product are reported in the following inventories:

TCSI : Not in compliance with the inventory

TSCA : Product contains substance(s) not listed on TSCA inventory.

AIIC : Not in compliance with the inventory

DSL : This product contains chemical substance(s) exempt from CEPA DSL Inventory requirements. It is regulated as a pesticide subject to Pest Control Products Act (PCPA) requirements. Read the PCPA label, authorized under the Pest Control Products Act, prior to using or handling this pest control product.

ENCS : Not in compliance with the inventory

ISHL : Not in compliance with the inventory

KECI : Not in compliance with the inventory

PICCS : Not in compliance with the inventory

IECSC : Not in compliance with the inventory

NZIoC : Not in compliance with the inventory

TECI : Not in compliance with the inventory

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### 15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture.

## SECTION 16: Other information

### Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

### Further information

Other information :

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