



# Vixeran<sup>®</sup>

VIXERAN<sup>®</sup> contains the endophytic bacterium *Azotobacter salinestris* strain CECT 9690, which fixes atmospheric nitrogen (N) and converts it into a form that can be absorbed by the plants. The bacteria will colonise both the leaf and the root, improving crop growth, yield, and quality of the crops.

Manufacturer	Distributor
CERES BIOTICS TECH, S.L. Mar Tirreno 8, Naves C27-C29, 28830 San Fernando de Henares, Madrid, Spain Tel: +34 919 20 35 49	Syngenta UK Limited CPC 4, Capital Park Fulbourn, Cambridge CB21 5XE Tel: 01223 883400

**In case of toxic or transport emergency ring 01484 538444 any time**

PROTECT FROM FROST. SHAKE WELL BEFORE USE.

## SAFETY PRECAUTIONS

### (a) Operator protection

Keep out of the reach of children.

Do not breathe dust.

Do not eat, drink or smoke during use.

Do not ingest. In case of contact with the eyes and/or

mucous membranes, wash the affected area with plenty of water.

Contains microorganisms. May cause sensitisation reactions. The use of respiratory protection equipment (disposable respirator or filtering mask, at least EN 149FFP3 or equivalent) is recommended when handling the preparation or applying the product.

Avoid contact with skin and eyes.

Apply with appropriate health precautions and do respect safety practices. Use appropriate personal protective equipment and wash hands after using the product.

### (b) Environmental Protection

Do not exceed the recommended dose rates.

Do not contaminate water with the product or its container. Do not clean application equipment near surface water.

Avoid contamination via drains from farmyards and roads.

### (c) Storage and disposal

Product is stable under storage and disposal conditions.

Keep containers tightly closed and in original containers when not in use in fresh and well aerated location, with temperature between 5° and 35° C.

Avoid direct sunlight and other heat sources.

The product is not combustible.

RINSE CONTAINER THOROUGHLY by using an integrated pressure rinsing device or manually rinsing three times.

Add washings to sprayer at time of filling and dispose of safely.



# 250 g

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the SYNGENTA Logo and the PURPOSE ICON  
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Do not dispose of waste into sewer. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.

Contaminated packaging: Empty remaining contents. Triple rinse containers. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

#### SECTION 14: Transport information

##### 14.1 UN number

Not regulated as a dangerous good

##### 14.2 UN proper shipping name

Not regulated as a dangerous good

##### 14.3 Transport hazard class(es)

Not regulated as a dangerous good

##### 14.4 Packing group

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.

#### SECTION 15: Regulatory information

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

Relevant EU provisions transposed through retained EU law

UK REACH List of restrictions (Annex 17): Not applicable

UK REACH Candidate list of substances of very high concern (SVHC) for Authorisation: Not applicable

The Persistent Organic Pollutants Regulations (retained Regulation (EU) 2019/1021 as amended for Great Britain): Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer: Not applicable

UK REACH List of substances subject to authorisation (Annex XIV): Not applicable

GB Export and import of hazardous chemicals - Prior informed Consent (PIC) Regulation: Not applicable

Control of Major Accident Hazards Regulations 2015 (COMAH): Not applicable

##### 15.2 Chemical safety assessment

A Chemical Safety Assessment is not required for this substance when it is used in the specified applications.

#### SECTION 16: Other information

##### Full text of other abbreviations

GB EH40: UK, EH40 WEL - Workplace

Exposure Limits

GB EH40 / TWA: Long-term exposure limit

(8-hour TWA reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight;

CLP - Classification Labelling Packaging Regulation; Regula-tion (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); ERx - Concentration as associated

with x% growth rate response; GHS - Globally Harmonized System; GRP - Good La-bour 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) Ef-fect Level; NOELR - No Observable Effect Loading Rate; NZloc - 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 sub-stance; 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; TECL - 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**

The information provided in this Safety Data Sheet is correct to the best of our knowledge,

information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use,

processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination

with any other materials or in any process, unless specified in the text.

#### COMPOSITION

*Azotobacter salinestrus* strain CECT 9690 at  $1 \times 10^7$  CFU/g as a wettable powder.

#### DIRECTIONS FOR USE

BEFORE APPLYING THE PRODUCT, READ THE LABEL CAREFULLY.

#### GENERAL INFORMATION

VIXERAN® contains the endophytic bacterium *Azotobacter salinestrus* strain CECT 9690, which fixes atmospheric nitrogen (N) and converts it into a form that can be absorbed by the plants. The bacteria will colonise both the leaf and the root, improving crop growth, yield, and quality of the crops.

#### Dose and Application Methods

VIXERAN® can be applied to a wide range of crops including, but not limited to arable, potato, grass, field vegetables and cover crops.

#### Foliar spray application

It is important that both the crop and the soil are not covered when spraying, to ensure the product can colonise both the leaves and the roots. Generally, VIXERAN® can be applied during the whole crop's growth cycle however, we recommend the following timing of application:

Crop	Dose rate	Recommended timing of applications	Recommended number of applications	Recommended water volume (l/ha)
Cereals	50 g/ha	GS13-16 (three leaves unfolded - six leaves unfolded) GS22-33 (two tillers detectable - node three at least 2cm above node 2)	1 to 2	100-400
Pulses		GS16 (six leaves unfolded) to start of flowering	1	
Maize		GS12-16 (two leaves unfolded - six leaves unfolded)	1	
Oilseed rape		GS11-16 (first leaf unfolded - six leaves unfolded) GS29-31 (End of shoot development - one visibly extended internode)	1 to 2	
Potato		From in-furrow to start of flowering	1 to 3	
Sugar beet		GS12-16 (two leaves unfolded - six leaves unfolded)	1	
Cover crops		1 week post emergence	1	
Permanent grassland		Early spring, then 1 week after every cut	1 to 4	

#### TANK MIXING

VIXERAN® is compatible with many fertilisers, biostimulants and crop protection products. For more information, please contact the manufacturer. Check the compatibility list on the website: [www.syngenta.co.uk](http://www.syngenta.co.uk).

Dilute any tank mix partners with water first before adding the VIXERAN®.

#### FOLLOWING CROPS

There are no restrictions on crops following an application of VIXERAN® in the previous season.

#### MIXING

When preparing VIXERAN® for application:

- Gradually pour the VIXERAN® into the spray solution, stirring continuously to achieve a uniform suspension.
- It is recommended to pre-dilute VIXERAN® with a small quantity of water prior to pouring into the spray tank.
- The spray mix must be kept agitated during mixing and application.
- Avoid low water temperatures below 5°C.

#### APPLICATION

For best results:

- Ensure good leaf coverage.
- The crop must be actively growing at the time of application.
- Do not apply when air temperature is below 5°C
- Low average day temperatures (less than 100C) post application will reduce colonisation speed.

#### After spraying

Thoroughly wash all spray equipment with water immediately after use.

#### COMPANY ADVISORY INFORMATION

The manufacturer guarantees the composition, formulation and content and the user will be responsible for damages caused by total or partial non-observation of the label instructions.

**Safety Data Sheet v 1.0**

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1 Product identifier**

Trade name: VICHAMU

Design code: 4257208

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

Uses of the Substance/Mixture: Disinfectant

**1.3 Details of the supplier of the CFC4 Capital**

Company: Syngenta UK Limited, CFC4 Capital

Part: Fulbourn, Cambridgeshire, CB21 5XE, United Kingdom

Telephone: +44 (0) 1223 882195

Telefax: +44 (0) 1223 882150

E-mail address of person responsible for the SDS: [product.tactical.enquiries@syngenta.com](mailto:product.tactical.enquiries@syngenta.com)

Emergency telephone number: +44 1484 538444

**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

Classification (REGULATION (CE) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

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Labeling (REGULATION (EU) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

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