

Zambia Reg. No. ZEMA/LSK/IP/011/2012 Reg. No. 12-B-60-19-B-72-3 CONTENTS: 5 Litres



HARMFUL IF SWALLOWED

NATIVO 300 SC IS A SYSTEMIC SUSPENSION CONCENTRATE FUNGICIDE WITH MESOSTEMIC PROPERTIES FOR THE CONTROL OF RUST IN COFFEE & SOYBEANS, EARLY BLIGHT IN POTATOES & TOMATOES, GREY LEAF SPOT IN MAIZE, LEAF RUST & POWDERY MILDEW IN WHEAT & BARLEY AND ALTERNARIA & FROG EYE IN TOBACCO.

Trifloxystrobin - Strobilurin

Packed For: Bayer Zimbabwe (Pvt) Ltd P.O. Box AY 78, Amby, Harare, Zimbabwe. Tel. 487211/487245-6 Fax: 487242

IN CASE OF POISONING PLEASE PHONE: +27 (21) 931-6129

Manufactured by: Bayer CropScience AG

Nativo® is a registered trademark of Bayer CropScience AG, Germany

Bayer

Batch No.: See on pack Date of Manufacture: See on pack

Zim & Zam/0912/Nativo 300SC 5L/Sales Panel - Crop Code:80512716B

















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102000008381
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SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade name NATIVO SC300
Product code (UVP) 06348084

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

Use Fungicide

1.3 Details of the supplier of the safety data sheet

Supplier Bayer (Pty) Ltd.

27 Wrench Road, P.O. Box 143

1600 Isando South Africa

Telephone +27 (011) 921 5911 **Telefax** +27 (011) 921 5766

Responsible Department QHSE - Nigel, South Africa

+27 (011) 365 8675 (during business hours only)

1.4 Emergency telephone no.

Emergency telephone no. +27 (0861) 555 777 (Western Cape Poisons Helpline)

Global Incident Response +1 (760) 476 3964 (Company 3E for Bayer CropScience)

Hotline (24h)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.

Reproductive toxicity: Category 2

H361d Suspected of damaging the unborn child.

Acute aquatic toxicity: Category 1

H400 Very toxic to aquatic life.

Chronic aquatic toxicity: Category 1

H410 Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.

Hazard label for supply/use required.

Hazardous components which must be listed on the label:

- Tebuconazole
- Trifloxystrobin



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Signal word: Warning

Hazard statements

H361d Suspected of damaging the unborn child.
H410 Very toxic to aquatic life with long lasting effects.

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

EUH208 Contains Trifloxystrobin, 1,2-benzisothiazolin-3-one,

5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one. May produce

an allergic reaction.

Precautionary statements

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P308 + P311 IF exposed or concerned: Call a POISON CENTER/ doctor/ physician.
Dispose of contents/container in accordance with local regulation.

2.3 Other hazards

No other hazards known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical nature

Suspension concentrate (=flowable concentrate)(SC) Trifloxystrobin/Tebuconazole 100:200 g/l

Hazardous components

Hazard statements according to Regulation (EC) No. 1272/2008

Name	CAS-No. /	Classification	Conc. [%]
	EC-No. / REACH Reg. No.	Regulation (EC) No 1272/2008	
Tebuconazole	107534-96-3	Acute Tox. 4, H302 Repr. 2, H361d Aquatic Acute 1, H400 Aquatic Chronic 1, H410	18,2
Trifloxystrobin	141517-21-7	Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	9,2
Fatty alcohol polyglycol ether	61791-13-7	Acute Tox. 4, H302 Eye Dam. 1, H318	> 1 - < 25
Urea	57-13-6	Not classified	> 1
Ethoxylated polyarylphenol	99734-09-5	Aquatic Chronic 3, H412	< 2
1,2-Benzisothiazol-3(2H)- one	2634-33-5	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400	> 0,005 - < 0,05



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Mixture of:	55965-84-9	Acute Tox. 3, H331	>= 0,0002 -
5-chloro-2-methyl-4-isothi		Acute Tox. 3, H311	< 0,0015
azolin-3-one and		Acute Tox. 3, H301	
2-methyl-4-isothiazolin-3-		Skin Sens. 1, H317	
one		Skin Corr. 1B, H314	
		Aquatic Acute 1, H400	
		Aquatic Chronic 1, H410	

Further information

Tebuconazole	107534-96-3	M-Factor: 1 (acute), 10 (chronic)
Trifloxystrobin	141517-21-7	M-Factor: 100 (acute)

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

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General advice Move out of dangerous area. Place and transport victim in stable

position (lying sideways). Remove contaminated clothing immediately

and dispose of safely.

Inhalation Move to fresh air. Keep patient warm and at rest. Call a physician or

poison control center immediately.

Skin contact Wash off thoroughly with plenty of soap and water, if available with

polyethyleneglycol 400, subsequently rinse with water. If symptoms

persist, call a physician.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at

least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Get medical attention if irritation

develops and persists.

Ingestion Rinse mouth. Do NOT induce vomiting. Call a physician or poison

control center immediately.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms No symptoms known or expected.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment Treat symptomatically. Gastric lavage is not normally required.

However, if a significant amount (more than a mouthful) has been ingested, administer activated charcoal and sodium sulphate. There is

no specific antidote.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable High volume water jet



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5.2 Special hazards arising from the substance or mixture

In the event of fire the following may be released:. Hydrogen cyanide (hydrocyanic acid), Carbon monoxide (CO), Nitrogen oxides (NOx), Hydrogen fluoride

5.3 Advice for firefighters

Special protective equipment for firefighters In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus.

Further information

Contain the spread of the fire-fighting media. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Precautions Avoid contact with spilled product or contaminated surfaces. Use

personal protective equipment.

6.2 Environmental precautions

Do not allow to get into surface water, drains and ground water.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, Methods for cleaning up

universal binder, sawdust). Clean contaminated floors and objects thoroughly, observing environmental regulations. Keep in suitable,

closed containers for disposal.

6.4 Reference to other

sections

Information regarding safe handling, see section 7.

Information regarding personal protective equipment, see section 8.

Information regarding waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling Use only in area provided with appropriate exhaust ventilation.

Advice on protection against No special precautions required.

fire and explosion

Hygiene measures Avoid contact with skin, eyes and clothing. Keep working clothes

> separately. Wash hands before breaks and immediately after handling the product. Wash hands immediately after work, if necessary take a shower. Remove soiled clothing immediately and clean thoroughly before using again. Garments that cannot be cleaned must be destroyed (burnt).

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Keep containers tightly closed in a dry, cool and well-ventilated place. Store in original container. Store in a place accessible by authorized persons only. Protect from frost. Keep away from direct sunlight.

Advice on common storage Keep away from food, drink and animal feedingstuffs.

Suitable materials HDPE (high density polyethylene)



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7.3 Specific end use(s) Refer to the label and/or leaflet.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Tebuconazole	107534-96-3	0,2 mg/m3 (SK-ABS)		OES BCS*
Trifloxystrobin	141517-21-7	2,7 mg/m3 (SK-SEN)		OES BCS*
Urea	57-13-6	10 mg/m3 (TWA)		OES BCS*

^{*}OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

8.2 Exposure controls

Respiratory protection Respiratory protection is not required under anticipated circumstances

of exposure.

Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's

instructions regarding wearing and maintenance.

Hand protection Please observe the instructions regarding permeability and

breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the

contact time.

Wash gloves when contaminated. Dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed. Wash hands frequently and always before eating,

drinking, smoking or using the toilet.

Material Nitrile rubber
Rate of permeability > 480 min
Glove thickness > 0,4 mm
Protective index Class 6

Directive Protective gloves complying with EN

374.

Eye protection Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).

Skin and body protection Wear standard coveralls and Category 3 Type 6 suit.

If there is a risk of significant exposure, consider a higher protective

type suit.

Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and

should be professionally laundered frequently.

Complete suit protecting against chemicals



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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form suspension

Colour white

Odour weak, characteristic pH 6 - 8 at 100 % (23 °C)

Flash point >100 ℃

No flash point - Determination conducted up to the boiling point.

Auto-ignition temperature 415 ℃

Density ca. 1,10 g/cm³ at 20 ℃

Partition coefficient: Tebuconazole: log Pow: 3,7

n-octanol/water

Trifloxystrobin: log Pow: 4,5 at 25 ℃

Viscosity, dynamic 0,12 Pas at 40 ℃

Viscosity, kinematic < 0,001 mm2/s at 40 ℃

Surface tension 34,5 mN/m
Explosivity Not explosive

92/69/EEC, A.14 / OECD 113

9.2 Other information Further safety related physical-chemical data are not known.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Thermal decomposition Stable under normal conditions.

10.2 Chemical stability Stable under recommended storage conditions.

10.3 Possibility ofNo hazardous reactions when stored and handled according to prescribed instructions.

10.5 Incompatible materials Store only in the original container.

10.6 Hazardous decomposition products

10.4 Conditions to avoid

No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity LD50 (Rat) ca. 2.500 mg/kg Acute inhalation toxicity LC50 (Rat) > 2,43 mg/l

Exposure time: 4 h

Highest attainable concentration.

Extremes of temperature and direct sunlight.



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Determined in the form of a respirable aerosol.

Acute dermal toxicity LD50 (Rat) > 4.000 mg/kg
Skin irritation No skin irritation (Rabbit)

Eye irritation Slight irritant effect - does not require labelling. (Rabbit)

Sensitisation Non-sensitizing. (Guinea pig)

OECD Test Guideline 406, Magnusson & Kligman test

Assessment repeated dose toxicity

Tebuconazole did not cause specific target organ toxicity in experimental animal studies. Trifloxystrobin did not cause specific target organ toxicity in experimental animal studies.

Assessment mutagenicity

Tebuconazole was not mutagenic or genotoxic in a battery of in vitro and in vivo tests. Trifloxystrobin was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment carcinogenicity

Tebuconazole caused at high dose levels an increased incidence of tumours in mice in the following organ(s): Liver. The mechanism of tumour formation is not considered to be relevant to man. Trifloxystrobin was not carcinogenic in lifetime feeding studies in rats and mice.

Assessment toxicity to reproduction

Tebuconazole caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Tebuconazole is related to parental toxicity. Trifloxystrobin caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Trifloxystrobin is related to parental toxicity.

Assessment developmental toxicity

Tebuconazole caused developmental toxicity only at dose levels toxic to the dams. Tebuconazole caused an increased incidence of post implantation losses, an increased incidence of non-specific malformations. Trifloxystrobin caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Trifloxystrobin are related to maternal toxicity.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish LC50 (Oncorhynchus mykiss (rainbow trout)) 0,286 mg/l

Exposure time: 96 h

Toxicity to aquatic EC50 (Daphnia magna (Water flea)) 0,224 mg/l

invertebrates Exposure time: 48 h

Chronic toxicity to aquatic NOEC (Daphnia (water flea)): 0,010 mg/l

invertebrates Exposure time: 21 d

The value mentioned relates to the active ingredient tebuconazole.

Toxicity to aquatic plants EC50 (Raphidocelis subcapitata (freshwater green alga)) 0,99 mg/l

Growth rate; Exposure time: 72 h

12.2 Persistence and degradability

Biodegradability Tebuconazole:

Not rapidly biodegradable

Trifloxystrobin:

Not rapidly biodegradable



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Koc Tebuconazole: Koc: 769 Trifloxystrobin: Koc: 2377

12.3 Bioaccumulative potential

Bioaccumulation Tebuconazole: Bioconcentration factor (BCF) 35 - 59

Does not bioaccumulate.

Trifloxystrobin: Bioconcentration factor (BCF) 431

Does not bioaccumulate.

12.4 Mobility in soil

Mobility in soil Tebuconazole: Slightly mobile in soils

Trifloxystrobin: Slightly mobile in soils

12.5 Results of PBT and vPvB assessment

PBT and vPvB assessment Tebuconazole: This substance is not considered to be persistent,

bioaccumulative and toxic (PBT). This substance is not considered to be

very persistent and very bioaccumulative (vPvB).

Trifloxystrobin: This substance is not considered to be persistent.

bioaccumulative and toxic (PBT). This substance is not considered to be

very persistent and very bioaccumulative (vPvB).

12.6 Other adverse effects

Additional ecological

information

No other effects to be mentioned.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product In accordance with current regulations and, if necessary, after

> consultation with the site operator and/or with the responsible authority, the product may be taken to a waste disposal site or incineration plant.

Not completely emptied packagings should be disposed of as hazardous Contaminated packaging

waste.

SECTION 14: TRANSPORT INFORMATION

SANS 10231

14.1 UN number 3082

14.2 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(TEBUCONAZOLE, TRIFLOXYSTROBIN SOLUTION)

14.3 Transport hazard class(es)

9 14.4 Packing group Ш

14.5 Environm. Hazardous Mark YES

IMDG

14.1 UN number 3082

14.2 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(TEBUCONAZOLE, TRIFLOXYSTROBIN SOLUTION)

14.3 Transport hazard class(es)

Ш 14.4 Packing group YES 14.5 Marine pollutant



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IATA

14.1 UN number 3082

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, 14.2 Proper shipping name

N.O.S.

(TEBUCONAZOLE, TRIFLOXYSTROBIN SOLUTION)

14.3 Transport hazard class(es) 9 14.4 Packing group Ш 14.5 Environm. Hazardous Mark YES

14.6 Special precautions for user

See sections 6 to 8 of this Safety Data Sheet.

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

No transport in bulk according to the IBC Code.

SECTION 15: REGULATORY INFORMATION

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

Further information

WHO-classification: III (Slightly hazardous)

SECTION 16: OTHER INFORMATION

Text of the hazard statements mentioned in Section 3

H301	loxic it swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and

eve damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H318 Causes serious eye damage.

H331 Toxic if inhaled.

Suspected of damaging the unborn child. H361d

Very toxic to aquatic life. H400

Very toxic to aquatic life with long lasting effects. H410 H412 Harmful to aquatic life with long lasting effects.

Abbreviations and acronyms

ADN European Agreement concerning the International Carriage of Dangerous Goods by

Inland Waterways

ADR European Agreement concerning the International Carriage of Dangerous Goods by

Road

ATE Acute toxicity estimate (ATE) CAS-Nr. Chemical Abstracts Service number

Conc. Concentration

EC-No. European community number ECx Effective concentration to x %

EINECS European inventory of existing commercial substances

European list of notified chemical substances **ELINCS**

ΕN European Standard EU European Union



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IATA International Air Transport Association

IBC International Code for the Construction and Equipment of Ships Carrying Dangerous

Chemicals in Bulk (IBC Code)
Inhibition concentration to x %

IMDG International Maritime Dangerous Goods

LCx Lethal concentration to x %

LDx Lethal dose to x %

ICx

LOEC/LOEL Lowest observed effect concentration/level

MARPOL: International Convention for the prevention of marine pollution from ships

N.O.S. Not otherwise specified

NOEC/NOEL No observed effect concentration/level

OECD Organization for Economic Co-operation and Development

RID Regulations concerning the International Carriage of Dangerous Goods by Rail

TWA Time weighted average

UN United Nations

WHO World health organisation

The information contained within this Safety Data Sheet is in accordance with the guidelines established by Regulation (EU) 1907/2006 and Regulation (EU) 2015/830 amending Regulation (EU) No 1907/2006 and any subsequent amendments. This data sheet complements the user's instructions, but does not replace them. The information it contains is based on the knowledge available about the product concerned at the time it was compiled. Users are further reminded of the possible risks of using a product for purposes other than those for which it was intended. The required information complies with current EEC legislation. Addressees are requested to observe any additional national requirements.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.