

Safety Data Sheet

Corona Pro- Reg. No: L 10566 (Act No 36 of 1947)

Date of issue: 02/05/2019

1) IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER.	
Product name:	CORONA PRO
UN number:	3082
Other means of identification Recommended use:	Tebuconazole 200, Trifloxystrobin 100 g/L SC Fungicide
Restrictions on use:	Agriculture
Distributed by:	MERIDIAN AGRITECH P O BOX 436 MODDERFONTEIN TEL 011 8228509 FAX 0866901386 MOBILE: 0834006056 www.agritech.co.za
Emergency Number:	POISON CENTRE (UNITAS HOSPITAL) 012 664 1100 WESTERN CAPE POISONS TELEPHONE SERVICE 0861 555 777 RAPID SPILL RESPONSE 0800 775 3305 GRIFFON POISON CENTRE: 082 446 8946
Chemical Name:	Tebuconazole: (RS)-1- <i>p</i> -chlorophenyl-4,4-dimethyl-3-(1 <i>H</i> -1,2,4-triazol-1-ylmethyl)pentan-3-ol Trifloxystrobin: methyl (<i>E</i>)-methoxyimino-{(<i>E</i>)-α-[1-(α,α,α-trifluoro- <i>m</i> -tolyl)ethylideneaminoxy]- <i>o</i> -tolyl}acetate
2) Classification of the substance / mixture:	
Classification of the product is based on the co-formulants listed in section 3.	Xn, N; R22, R23/24/25, R34, R38, R41, R43, R50/53, R63 Full text of R-phrases: see section 15.
Label elements:	Hazard symbols: Xn – Harmful N – Dangerous for the environment Health Hazard   Signal Word: Harmful
Health effects: eyes:	Damaging to eyes
Health effects: skin:	Irritating to skin
Health effects: ingestion	Harmful
Health effects: inhalation	Harmful
Health effects: Reproduction	Reproduction toxicity in a two-generation study.

Health effects: Other

Not carcinogenic, mutagenic or genotoxic.

3) COMPOSITION / INFORMATION ON INGREDIENTS:

Mixture:

Chemical name	Composition	CAS No.	EC No.	Classification according to Regulation EC 1272/2008 (CLP)	Classification according to 67/548/EEC
Tebuconazole	200 g/L	107534-96-3	403-640-2	Repr. 2, H361d Acute tox. 4, H302 Aquatic Chronic 2, H411	Repr. Cat. 3 R63 Xn; R22 N; R51/53
Trifloxystrobin	100 g/L	141517-21-7		Skin sen. 1, H317 Aquatic Acute 1, H400 Aquatic chronic 1, H410	R43 N; R50/53
Denatonium benzoate in Monoethylene glycol	47 g/L	107-21-1		Acute Tox. Cat. 4, H302	

Full text of R- and S-phrases: see section 15.

4) First Aid Measures:

Eye contact:

Immediately flush eyes, holding eyelids open, with plenty of water for at least 15 minutes. Remove contact lenses, if worn, after the first 5 minutes and then continue rinsing. Seek medical assistance if irritation persists.

Skin contact:

Remove contaminated clothing, leather items and shoes and gently wipe off excess chemical. Wash affected areas thoroughly with non-abrasive soap and water. Do not rub the skin. Seek medical attention if irritation persists. Wash contaminated clothing before re-use.

Ingestion:

If swallowed **DO NOT** induce vomiting unless advised to do so by a medical practitioner. Never give anything via mouth to an unconscious person. Rinse mouth if person is conscious and able. **Seek medical advice immediately.**

Inhalation:

Remove victim to well ventilated area and loosen clothing around the neck. Keep victim warm and at rest. Qualified personnel should administer oxygen if breathing is difficult. **Immediately seek medical attention.**

Indication of immediate medical attention and special treatment needed: Advice to physician

Symptomatic treatment and supportive therapy as indicated, no known specific antidote. Gastric lavage is not normally required. If significant amounts have been ingested, administer activated charcoal and sodium sulphate.

5) Fire-Fighting Measures:

Suitable extinguishing media:

Water spray, alcohol-resistant foam, carbon dioxide (CO₂), dry powder.

Unsuitable extinguishing media:

Water jet, due to contamination/spreading risk.

Special hazards arising from the substance or mixture:

In the event of fire hydrogen cyanide (hydrocyanic acid), carbon monoxide (CO), nitrogen oxides (NO_x) or hydrogen fluoride may be released.

Fire-fighting:

Remove spectators from surrounding area. Use a

<p>Protective clothing:</p>	<p>recommended extinguishing agent. Fight fire from a maximum distance using unmanned hose holders or monitor nozzles. Remove container from affected area if possible without risk. Dike extinguishing media with sand or earth for later disposal, do not allow to reach water or sewer systems. Dispose of debris and contaminated extinguishing water according to regulations. Water can be used to cool unaffected containers but must be contained for later disposal. Avoid pollution of waterways and ground water.</p> <p>Fire may produce irritating or poisonous vapours, mists or other products of combustion. Avoid breathing fumes.</p> <p>Fire-fighters and others that may be exposed should wear full protective clothing and self-contained breathing apparatus.</p>
<p>6) Accidental Release Measures:</p>	
<p>Personal precautions:</p> <p>Environmental precautions:</p> <p>Cleaning procedure:</p> <p>Disposal:</p>	<p>Do not inhale vapour or spray. Avoid contact with spilled product or contaminated surfaces. For personal protection see section 8.</p> <p>Do not contaminate waterways, drains and groundwater. If contamination of waterways, drains, rivers or lakes is unavoidable, warn the local authorities (Police and Department of Water/Environmental affairs) immediately.</p> <p>Do not eat, drink or smoke during the clean-up process. Clear area of unprotected personnel and animals. Wear protective gear as mentioned in section 8 below. Contain the spill and stop leak provided it is safe to do so. Soak up minor spills with suitable absorbent, non-combustible material such as sand, sawdust, diatomaceous earth, etc. Shovel or sweep absorbed material and collect in a suitable container which can be labelled and sealed for disposal according to local regulations. Do not flush spilled material into drains or waterways. Should spilled product come into contact with water, dike water and dispose of together with spilled material. Clean contaminated areas and equipment thoroughly with water containing detergent and collect washings for disposal. For large spills, dike spill area and pump off product. Collect washings to avoid any contamination of surface and ground water, water supplies and drains. Deal with spillages immediately.</p> <p>Used absorbent material and washings should be stored in labelled, sealable containers until these can be disposed of according to local regulations. Open burning or dumping of this material is prohibited.</p>
<p>7) Handling & Storage:</p>	
<p>Handling:</p>	<p>Avoid contact with skin, eyes and clothing. Do not breathe in fumes or spray. Ensure adequate ventilation. Suitable protective equipment should be used as a preventative measure during spraying and mixing. Do not eat, drink, smoke or apply cosmetics while using. Before removing gloves, clean thoroughly with a non-abrasive soap and water. Wash hands thoroughly with non-abrasive soap and water after handling, and before eating, tobacco use, drinking, or using the toilet. Protective clothing should be removed immediately after use washed before reuse. Do not apply directly to areas where surface water is present or to intertidal areas below the mean high water mark. Dispose of water used to clean equipment suitably to avoid contamination of water sources.</p> <p>Store under lock and key in original container tightly closed and in a dry, cool, well-ventilated area. Store away from sources of ignition and away from foodstuffs, fertilisers and</p>

Storage:	seeds. Keep away from children, uninformed persons and animals. Do not contaminate other pesticides, fertilisers, water, food or feed by storage or disposal. Protect from frost and direct sunlight. Local regulations should be complied with.
8) Exposure Control / Personal Protection:	
<p><u>Occupational exposure limits:</u></p> <p><u>Engineering controls:</u></p> <p><u>PERSONAL PROTECTIVE EQUIPMENT:</u></p> <p>Clothing:</p> <p>Gloves:</p> <p>Eye protection:</p> <p>Respiratory protection:</p> <p>Emergency eye wash:</p>	<p>Tebuconazole: 0.2 mg/m³ (TWA) Trifloxystrobin: 2.7 mg/m³ (TWA)</p> <p>It is essential to provide adequate ventilation. The measures appropriate for a particular work site depend on how this material is used and on the extent of exposure. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.</p> <p>Employee must wear appropriate protective (impervious) clothing to prevent prolonged skin exposure with this substance.</p> <p>Employee must wear appropriate chemical-resistant gloves, preferably PVC or nitrile gloves, to prevent prolonged skin contact with this substance.</p> <p>The use of safety goggles or full-face shield is recommended.</p> <p>Respiratory protection is not required under anticipated circumstances of exposure. Use only to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at the source. Always follow respirators manufacturer's instructions regarding wearing and maintenance.</p> <p>Where there is any possibility that an employee's eyes may be exposed to this substance, the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.</p>
9) Physical & Chemical Properties:	
<p>Form:</p> <p>Colour:</p> <p>Odour:</p> <p>Odour threshold:</p> <p>pH:</p> <p>Melting point / Freezing point (°C)</p> <p>Initial boiling point and boiling range</p> <p>Flash point:</p> <p>Evaporation rate:</p> <p>Flammability (solid, gas)</p> <p>Upper/ lower flammability or explosive limits:</p> <p>Vapour pressure:</p> <p>Vapour density:</p> <p>Relative density:</p> <p>Solubility(ies)</p> <p>Partition coefficient: n-octanol/water</p> <p>Auto-ignition temperature:</p> <p>Viscosity:</p>	<p>Liquid, suspension concentrate</p> <p>Cream white</p> <p>Characteristic</p> <p>No data available</p> <p>6 - 9</p> <p>Tebuconazole: 105 Trifloxystrobin: 72.9</p> <p>Trifloxystrobin: 312°C/760 mHg</p> <p>Not flammable</p> <p>No data available</p> <p>No data available</p> <p>Not explosive</p> <p>Tebuconazole: 0.0017 mPa (20°C) Trifloxystrobin: 0.0034 mPa (25°C)</p> <p>No data available</p> <p>1.056</p> <p>Suspends in water</p> <p>Tebuconazole: log K_{ow} 1.25 Trifloxystrobin: log K_{ow} 4.5</p> <p>415°C</p> <p>No data available</p>
10) Stability & Reactivity:	

<p>Reactivity:</p> <p>Chemical stability:</p> <p>Hazardous decomposition product(s):</p> <p>Conditions to avoid:</p> <p>Incompatible materials:</p>	<p>Stable under normal storage conditions.</p> <p>When stored appropriately this product should show no significant degradation for 2 years from the date of manufacture. Thermally and chemically stable.</p> <p>No decomposition products are expected under normal use conditions.</p> <p>Protect from extreme temperatures, direct sunlight, open flames and sources of ignition.</p> <p>Always store in original container.</p>
11) Toxicological Information:	
<p>Acute:</p> <p>Oral LD50 > 3 000 mg/kg, rat.</p> <p>Dermal LD50 > 5 000 mg/kg, rat.</p> <p>Information based on active ingredient</p> <p>Inhalation LC50 (4h): Tebuconazole: 0.37 mg/L air, rat Trifloxystrobin: >4.65 mg/L air, rat</p> <p>Skin irritation : Not an irritant, rabbit.</p> <p>Eye irritation : Mild irritant, rabbit.</p> <p>Other : Indication of possible carcinogenic effect in animal tests, but is not considered to be to be relevant to man. Not mutagenic or genotoxic. Some evidence sow reproduction toxicity related to parental toxicity.</p>	
12) Ecological Information:	
<p>Information below based on active ingredient:</p> <p>Bees: Tebuconazole: Contact LD50 (48 h) > 200 ug/bee; Oral LD50 (24 h) >83 ug/bee Trifloxystrobin: LD50 > 200 ug/bee (oral and contact)</p> <p>Birds: Tebuconazole: Acute oral LD₅₀ for male Japanese quail 4438, female Japanese quail 2912, bobwhite quail 1988 mg/kg b.w. Dietary LC₅₀ (5 d) for mallard ducks >4816, bobwhite quail >5000 mg/kg feed. Trifloxystrobin: Acute oral LD₅₀ for bobwhite quail >2000, mallard ducks >2250 mg/kg. Dietary LC₅₀ for bobwhite quail and mallard ducks >5050 ppm.</p> <p>Fish: Tebuconazole: LC50 (96h) rainbow trout 4.4 mg/L, bluegill sunfish 5.7 mg/L. Trifloxystrobin: LC50 (96h) Rainbow trout 0.015 mg/L, bluegill sunfish 0.054 mg/L.</p> <p>Daphnia: Tebuconazole: LC50 (48h) 2.79 mg/L. Trifloxystrobin: LC50 (48h) 0.016 mg/L</p> <p>Algae: Tebuconazole: E_rC50 (72h) for <i>Pseudokirchneriella subcapitata</i> 3.80 mg/L. Trifloxystrobin: E_bC50 (3d) for <i>Scenedesmus subspicatus</i> 0.0053 mg/L.</p> <p>Worms: Tebuconazole: Acute LC50 (14d) for <i>Eisenia foetida</i> 1381 mg/kg dry soil. Trifloxystrobin: LC50 (14d) >1000 mg/kg dry soil.</p> <p>Other beneficial organisms:</p> <p>Tebuconazole: EC15 (28 d) for <i>Chironomus riparius</i> 2.51 mg/L. No adverse effects on ground dwellers, e.g. ground beetles (<i>Poecilus cupreus</i>) (adults and larvae) or on foliage dwellers, e.g. ladybirds (<i>Coccinella septempunctata</i>), Trifloxystrobin: Field tests indicate low risk in normal use to a wide range of beneficial arthropods, including predatory mites, ground- and foliage-dwelling predators and parasitic wasps.</p> <p>Tebuconazole: Under field conditions, the compound degraded much more rapidly, and did not accumulate in long-term studies (3–5 y). Since no residues could be detected in deeper soil layers of these and other studies, and adsorption/desorption studies indicated a low mobility in the soil, groundwater contamination through leaching can be excluded. In natural waters, hydrolysis and indirect photolysis occur; in a pond study, the compound dissipated from the water body with DT₅₀ 4–6 w. Low vapour pressure and strong adsorption result in low volatilisation into the air. Trifloxystrobin: Dissipates rapidly from soil and surface water. Soil DT₅₀ 4.2–9.5 d. K_{oc} 1642–3745. No leaching potential. In water, DT₅₀ 0.3–1 d, DT₉₀ 4–8 d.</p>	
13) Disposal Considerations:	
<p>Waste Disposal: Waste should not be re-used. Do not contaminate rivers, dams, water sources, food or feed by disposal. Open dumping or burning of this pesticide is prohibited. Wastes resulting from the use of this product should be disposed</p>	

of according to local regulations. Do not dispose of undiluted chemical on site.

Container Disposal: Refer to the product label for instructions. Triple rinse empty containers before disposal in the following manner: Invert the container over the spray or mixing tank and allow to drain for at least 30 seconds after the flow has slowed to a drip. Thereafter, rinse the container three times with a volume of water equal to a third of that of the container volume. Add rinsing to the contents of the spray tank before destroying the container in the prescribed manner. Empty containers should not be burnt; puncture and flatten containers and dispose at a licensed landfill site according to local regulations. Prevent contamination of water sources, food or feed by disposal. **DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE.** If recycling, replace cap and take containers to the designated recycling point. If containers cannot be recycled, they should be disposed of together with the waste chemical according to local regulations.

14) Transportation Information:

UN Number: 3082

Road transport ADR/RID

Class: 9

Packing group: III

Hazard label: 90, E

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (TEBUCONAZOLE, TRIFLOXYSTROBIN SOLUTION)

This classification is in principle not valid for carriage by tank vessel on inland waterways.

Maritime transport IMDG/IMO

Class: 9

Packing group: III

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (TEBUCONAZOLE, TRIFLOXYSTROBIN SOLUTION)

Marine pollutant

Air transport IATA/ICAO

Class: 9

Packing group: III

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (TEBUCONAZOLE, TRIFLOXYSTROBIN SOLUTION)

Considered a marine pollutant.



15) Regulatory Information: R22, R23/24/25, R34, R38, R41, R43, R50/53, R63

Symbols: Xn, N

Signal words: Xn – Harmful

N – Dangerous for the environment

Risk – Phrases:

R22 Harmful if swallowed.

R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

R34 Causes burns.

R38 Irritating to skin.

R41 Risk of serious damage to eyes.

R43 May cause sensitization by skin contact.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R63 Possible risk of harm to the unborn child.

Safety – Phrase:

S2: Keep out of the reach of children.

S36/37 Wear suitable protective clothing and gloves.

S60 This material and its container must be disposed of as hazardous waste.

S61: Avoid release to the environment. Refer to special instructions/Safety datasheets.

Hazard Statements:

H302: Harmful if swallowed.

H317: May cause an allergic skin reaction.

H361d: Suspected on damaging the unborn child.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

H411: Toxic to aquatic life with long lasting effects.

16. Other Information

All information and instructions provided in this Safety Data Sheet (SDS) are based on the current state of scientific and technical knowledge at the date indicated on the present SDS and are presented in good faith and believed to be correct. This information applies to the product as such. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear.

It is the responsibility of persons in receipt of this SDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with this product. If the recipient subsequently produces formulation(s) containing this product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from this SDS to their own SDS.

The information contained herein is provided in good faith but makes no representation as to its comprehensiveness or accuracy. A properly trained person using this product intends this document only as a guide to the appropriate handling of the material. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

MERIDIAN AGRITECH MAKES NO REPRESENTATION OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANT ABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, MERIDIAN AGRITECH (PTY) LTD WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.