



# SAYONARA XTRA

BEFORE USING THIS PRODUCT, READ THE LABEL CAREFULLY

**SAYONARA XTRA** **SEED TREATMENT**

Reg. No. L11021, Act/Wet No. 36 of/van 1947 1: 12/03/2021

A systemic flowable concentrate insecticide seed treatment for the control of pests on crops as listed.

'n Sistemiese vloeibare konsentraat insekdoder as saadbehandeling vir die beheer van plae op gewasse soos aangedui.

FRAC FUNGICIDE GROUP CODE **4A** FRAC SWAMDODERGROEPKODE

**ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL**

Thiamethoxam (Neonicotinoid) 600 g/l Tiametoksam (Neonikotinoïed)

Registration Holder / Registrasiehouer  
Meridian Agrochemical Company (Pty.) Ltd. / (Edms.) Bpk.  
Reg. No. 2000/010819/07  
P.O. Box / Posbus 436, Modderfontein, 1645, South Africa / Suid-Afrika

DIRECTIONS FOR USE ENCLOSED  
Batch Number  
Date of Manufacture

REF TO DETAILS AS PRINTED  
ON CONTAINER / BAG

VERWYS NA BESONDERHEDE  
SOOS OP HOUER / SAK GEDRUK

UN Number: 3082

**Meridian agritech**

CAUTION / VERSIGTIG

## **WARNINGS**

### **Withholding periods**

Do not graze crops of which the seed has been treated within 12 weeks after planting.

- Treated seed must not be used for human and animal consumption.
- Handle with care.
- Protect from light.
- **Treated seed may be poisonous to seed-eating birds. Treated seed must be planted properly and completely covered with soil. No seed should be left where it can be eaten by birds.**
- Store under lock and key in the original, tightly closed container in a cool, dry, well-ventilated area.
- Harmful if inhaled, absorbed through the skin or swallowed.
- Store away from food, feed, seed and fertilisers.
- Keep away from children, uninformed persons and animals.
- Treated seed should not be carried over from one season to the next. Only treat seed that is to be planted during the same season.
- **SAYONARA XTRA** is a non-pigmented formulation and should at all times be applied in combination with a seed treatment pigment, to obtain a visible colouration of treated seeds, and to ensure a clear manner to distinguish treated versus non-treated seed.

**Although this remedy has been extensively tested under a large variety of conditions, the registration holder does not warrant that it will be efficacious under all conditions because the action and effect thereof may be affected by factors such as abnormal climatic and storage conditions, quality of dilution water, compatibility with other substances not indicated on the label; and the occurrence of resistance of the pest against the remedy concerned; as well as by the method, time and accuracy of the application. The registration holder furthermore does not accept responsibility for damage to crops, vegetation, the environment or harm to man or animal; or for lack of performance of the remedy concerned due to failure of the user to follow the label instructions; or to the occurrence of conditions which could not have been foreseen in terms of the registration. Consult the supplier in the event of any uncertainty.**

### **GLOBALLY HARMONIZED SYSTEM, EU (GHS)**

Pictogram:



Signal word: Warning

#### **Hazard Statements:**

- H302: Harmful if swallowed.
- H314: Causes severe skin burns and eye damage.
- H315: Causes skin irritation.
- H318: Causes serious eye damage.
- H319: Causes serious eye irritation.
- H335: May cause respiratory irritation.
- H372: Causes damage to organs through prolonged or repeated exposure (Gastrointestinal Tract, Oral).
- H373: May cause damage to organs through prolonged or repeated exposure (Lungs).
- H400: Very toxic to aquatic life.
- H410: Very toxic to aquatic life with long-lasting effects.

#### **Precautionary Statements:**

- P201: Obtain special instructions before use.
- P202: Do not handle until all safety precautions have been read and understood.
- P264: Wash face and hands thoroughly after handling.
- P261: Avoid breathing fumes/gas/mist/vapours/spray.
- P262: Do not get in eyes, on skin, or on clothing.
- P270: Do not eat, drink or smoke when using this product.
- P273: Avoid release to the environment.

## **PRECAUTIONS**

- Wear protective clothing (e.g. coverall, rubber gloves and boots) and face shield or goggles (with side shields) when preparing the mixture or when applying.
- Wash with soap and water immediately after use or in the event of accidental skin contact.
- If poisoning is suspected and discomfort is experienced – stop working immediately and consult a physician.
- Wash contaminated clothing before re-use.
- Do not eat, drink or smoke while applying the product, or before washing face and hands.
- Bury all treated seed spilled on the soil surface.
- Avoid contamination of other crops, grazing, rivers, dams and boreholes.
- Clean all equipment before and after use. Dispose of rinsate where it will not contaminate crops, pastures, rivers, dams or other water sources.
- Prevent contamination of food, feed, drinking water and eating utensils.
- Prevent contamination of water intended for household or irrigation purposes.
- Invert the empty container over the tank and allow to drain for at least 30 seconds after the flow has slowed to a drip. Rinse the empty container **THREE TIMES** with a volume of water equal to a minimum of 30 % of that of the container. Add rinsings to the contents of the tank before destroying the container in the prescribed manner.
- Destroy empty containers by perforating and flattening before disposal in a safe way.
- DO NOT use the empty container for any other purpose.
- Mark bags containing treated seed clearly.
- During planting, treated seed must be completely covered with soil. Do not use excess seed as feed for birds or animals.
- Treated seed must be handled with care. Label the bags which contain the treated seed clearly '**HARMFUL – treated with insecticide**'.

## **MODE OF ACTION**

**SAYONARA XTRA** is an insecticide applied as a seed treatment with contact, stomach and systemic activity. It is rapidly taken up into the plant and transported acropetally in the xylem. It acts as an agonist of the nicotinic acetylcholine receptor, affecting the synapses in the insect central nervous system.

## **RESISTANCE MANAGEMENT**

For resistance management, **SAYONARA XTRA** is a group code 4A insecticide. Any insect population may contain individuals naturally resistant to **SAYONARA XTRA** and other group code 4A insecticides. The resistant individuals can eventually dominate the insect population if these insecticides are used repeatedly. These resistant insects may not be controlled by **SAYONARA XTRA** or any other group code 4A insecticide.

### **To delay insecticide resistance:**

- Avoid exclusive repeated use of insecticides from the same insecticide group code. Alternate or tank mix with registered products from different insecticide group codes.
- Integrate other control methods (chemical, cultural, biological) into insect control programmes.

Since the occurrence of resistance cannot be forecast, users are advised to keep treated crops under close observation. If treatment is not effective following the use of **SAYONARA XTRA** as recommended, a resistant strain may be present. If a resistant strain is positively identified, consideration should be given to prompt use of an insecticide with a different mode of action for which there is no record of resistance to the relevant pest. **For specific resistance management information, contact the registration holder of this product.** Refer to the IRAC Website ([www.irac.info/irac/index.html](http://www.irac.info/irac/index.html)) for the latest guidelines.

## **USE RESTRICTIONS**

- Only treat high quality certified seed with **SAYONARA XTRA**.
- **SAYONARA XTRA** may only be used on commercial seed. Do not use on inbred parent plants of hybrids or experimental cultivars. In the case of newly released cultivars or hybrids, use only after a Meridian Agritech representative or your seed supplier has been consulted.
- **DO NOT use on Sweetcorn.**

- Sufficient soil moisture and mild weather conditions are important for the efficacy of **SAYONARA XTRA**. Unfavourable germination conditions, such as prolonged cold spells after planting, drought, excessive moisture, or a combination thereof, can cause delayed germination.
- Under conditions of high insect population pressure, damage or the destruction of seedlings may result despite the seed treatment.
- **EXPECTED PERIOD OF CONTROL:** 6 weeks

#### DIRECTIONS FOR USE

Use only as directed.

#### MIXING INSTRUCTIONS

**SAYONARA XTRA** is a flowable concentrate which must first be mixed with a small quantity of water to form a slurry. Mix thoroughly with the recommended amount of water before applying to the seed. The mixture must be used within 24 hours after preparation.

#### COMPATIBILITY

**SAYONARA XTRA** may be used on seed previously treated with a fungicide. Should **SAYONARA XTRA** be used in combination with a fungicide seed treatment product, the seed must first be treated with the fungicide according to the manufacturer's instructions. Thereafter it may be treated with **SAYONARA XTRA**. **SAYONARA XTRA** must not be used in combination with Teprosyn Mo/P since this product will hinder the seed coverage of **SAYONARA XTRA**.

#### APPLICATION TECHNIQUES

**SAYONARA XTRA** can be applied with most large seed treatment apparatus, provided that the product mixture is applied directly to the seed through spray nozzles, or by rotary disks, during the seed treatment process. It is important that any applicator used is calibrated using **SAYONARA XTRA**, since the flow rate may differ from other products used for seed treatments.  
Add the mixture to the seed while mixing, until even coverage of the seed is achieved. Mix until the seed is evenly coated, appears dry and no excess mixture remains on the sides or in the bottom of the mixer. Do not mix for longer than necessary.  
It is preferable to treat the seed immediately before planting, and not allow it to stand unnecessarily.

#### RECOMMENDATIONS

CROP & PEST	DOSAGE RATE	REMARKS
<b>MAIZE</b>	0.5 mg a.i. / kernel	Seedling damage may occur during high pest pressure despite seed treatment with <b>SAYONARA XTRA</b> .
<b>False Wireworms</b> ( <i>Somaticus</i> and <i>Gonocephalum</i> spp.)	Add water in the ratio of 2 parts of water for one part of <b>SAYONARA XTRA</b>	Seed treated with <b>SAYONARA XTRA</b> must preferably be planted between 3 and 5 centimetres deep.  Use the tables below to determine the correct dosage rates. .

**Seed packed as number of kernels per bag:**

Dosage in mL product/bag	Package size in number of kernels per bag
75	90 000
67	80 000
58	70 000
50	60 000

**Seed packed per weight and the Thousand Grain Weight (TGW) is KNOWN for the batch:**  
Please use the two formulas to calculate the volume of **SAYONARA XTRA** needed to treat 100 kg of seed (**NB only use if TGW is known**)

$(1000 \div \text{TGW}) \times 100\,000 = n$  kernels per 100 kg

$\frac{(nx0.5)}{1000} \div 0.6 = m\ell$  product per 100 kg seed

**Seed packed per weight and the Thousand Grain Weight (TGW) is UNKNOWN for the batch:**

292 mL plus 1 200 mL water for 100 kg seed

<b>SUNFLOWER</b> <b>Ground Weevils</b> ( <i>Protostrophus spp.</i> )	583 mL Plus 920 mL water / 100 kg seed	Initial leaf damage may occur since ground weevils need to feed on treated plants to be killed.
<b>WHEAT</b> <b>Russian Wheat Aphid</b> ( <i>Diuraphis noxia</i> )	200 mL Plus 1300 mL water / 100 kg seed	Despite <b>SAYONARA XTRA</b> treatment, a mild infestation of Russian wheat aphid may still occur.  Treatment of wheat seed with <b>SAYONARA XTRA</b> will not necessarily provide full control of Russian wheat aphid numbers. Some aphids may still occur on treated plants but their detrimental effect on plant growth and the consequential reduction in yield should be limited.

## WAARSKUWINGS

### Onthoudingsperiodes

Moenie gewasse waarvan die saad behandel is binne 12 weke na plant bewei nie.

- Behandelde saad mag nie vir menslike of dierlike inname gebruik word nie.
- Hanteer versigtig.
- Beskerm teen lig.
- **Behandelde saad mag giftig vir saadvretende voëls wees. Behandelde saad moet behoorlik geplant word en volledig met grond bedek word. Geen saad mag gelos word waar voëls dit kan vreet nie.**
- Bêre agter slot-en-grendel in die oorspronklike digsluitende houer in 'n koel, droë, goed-geventileerde plek.
- Skadelik indien ingeasem, deur die vel geabsorbeer of ingesluk word.
- Bêre weg van voedsel, voer, saad en kunsmis.
- Hou buite bereik van kinders, oningesigte persone en diere.
- Behandelde saad moenie van een seisoen na 'n volgende oorgedra word nie. Behandel slegs saad wat in dieselfde seisoen geplant gaan word.
- **SAYONARA XTRA** is 'n nie-gepigmenteerde formulering en moet ten alle tye in kombinasie met 'n saadbehandelingspigment toegedien word. Hierdeur word 'n sigbare kleuring van die behandelde saad verkry wat 'n duidelike onderskeid tussen behandelde en onbehandelde saad verseker.

Alhoewel hierdie middel omvattend onder 'n groot verskeidenheid toestande getoets is, waarborg die registrasiehouer nie dat dit onder alle toestande doeltreffend sal wees nie, aangesien die werking en effek daarvan beïnvloed kan word deur faktore soos abnormale grond-, klimaats- en bergingstoestande, kwaliteit van verdunningswater, verenigbaarheid met ander stowwe wat nie op die etiket aangedui is nie en die voorkoms van weerstand van die plaag teen die betrokke middel sowel as die metode, tyd en akkuraatheid van toediening. Verder aanvaar die registrasiehouer nie verantwoordelikheid vir skade aan gewasse, plantegroei, die omgewing of vir nadelige effek op mens of dier of vir 'n gebrek aan prestasie van die betrokke middel as gevolg van die versuum van die gebruiker om die etiketaanwysings na te kom of as gevolg van die ontstaan van toestande wat nie kragtens die registrasie voorsien kon word nie. Raadpleeg die verskaffer in die geval van enige onsekerheid.

### GLOBALE HARMONISERINGSISTEEM, EU (GHS)

Piktogram:



Teikenwoord: Waarskuwing

#### Veiligheidsverklarings:

- H302: Skadelik indien ingesluk.
- H314: Veroorsaak ernstige velbrand en oogskade.
- H315: Veroorsaak velirritasie.
- H318: Veroorsaak ernstige oogskade.
- H319: Veroorsaak ernstige oogirritasie.
- H335: Mag respiratoriese irritasie veroorsaak.
- H372: Veroorsaak skade aan organe deur verlengde en herhaalde blootstelling (Gastro-intestinale kanaal, Mondelings).
- H373: Mag skade aan organe deur verlengde en herhaalde blootstelling veroorsaak (Longe).
- H400: Baie giftig vir waterlewe.
- H410: Baie giftig vir waterlewe met langdurige uitwerking.

#### Voorsorgmaatreëls Verklarings:

- P201: Verkry spesiale instruksies voor gebruik.
- P202: Moenie hanteer voordat alle veiligheids voorsorgmaatreëls gelees en verstaan is.
- P264: Was gesig en hande deeglik na hantering.
- P261: Vermy die inaseming van dampe/gasse/mis/wasem/sproei.
- P262: Moenie in oë, op vel, of op klere kom nie.

- P270: Moenie eet, drink of rook wanneer produk gebruik word nie.
- P273: Verhoed die vrystelling aan die omgewing.

## VOORSORGMAATREËLS

- Dra beskermende klere (bv. oorpak, rubberhandskoene en stewels) en gesigmasker of skermbril wanneer mengsel voorberei of toegedien word.
- Was met seep en water onmiddellik na gebruik, of in die geval van toevallige velkontak.
- Indien vergiftiging vermoed en ongemak ervaar word – staak werk dadelik en kontak 'n geneesheer.
- Was besoedelde klere voor hergebruik.
- Moenie eet, drink of rook tydens toediening van die produk of voordat hande en gesig gewas is nie.
- Begrawe alle saad wat gemors is onder die grondoppervlakte.
- Verhoed die besoedeling van ander gewasse, weiding, riviere, damme en boorgate.
- Maak toedieningsapparaat voor en na gebruik skoon. Uitspoelwater moet nie gewasse, weidings, riviere, damme of ander waterbronne besoedel nie.
- Voorkom die besoedeling van voedsel, voer, drinkwater en eetgerei.
- Voorkom die besoedeling van water wat vir houhoudelike gebruik of besproeiingsdoeleindes gebruik word.
- Keer die leë houer om oor die tenk of mengbak en dreineer vir minstens 30 sekondes nadat die vloeistof 'n gedrup verminder het. Spoel die houer daarna **DRIE KEER** uit met 'n volume water gelykstaande aan 'n minimum van 30% van die inhoud van die houer. Gooi die spoelwater by die inhoud van die tenk voordat die houer op die voorgeskrewe manier vernietig word.
- Vernietig leë houers deur gate daarin te maak en dit plat te maak voordat daarvan op 'n veilige manier van weggedoen word.
- MOENIE die houer vir enige ander doel gebruik nie.
- Merk sakke wat behandelde saad bevat duidelik.
- Gedurende plant moet behandelde saad heeltemal met grond bedek word. Moenie oortollige saad as voer vir diere of voëls gebruik nie.
- Behandelde saad moet versigtig hanteer word. Etiketteer die sakke met behandelde saad duidelik met '**SKADELIK – met insekdoder behandel**'.

## METODE VAN WERKING

**SAYONARA XTRA** is 'n insekdoder wat as 'n saadbehandeling toegedien word met kontak-, maag- en sistemiese werking. Die produk word vinnig deur die plant opgeneem en akropetaal in die xileem getranslokeer. Dit werk as 'n antagonis van die nikotiniese asetielcholienreceptor wat die sinapse in die insek se sentrale senuweestelsel affekteer.

## WEERSTANDSBESTUUR

Vir weerstandsbestuur is **SAYONARA XTRA** 'n groep kode 4A insekdoder. Enige insekpopulasie mag individue bevat wat natuurlik weerstandbiedend is teen **SAYONARA XTRA** en ander groepkode 4A insekdoders. Hierdie weerstandbiedende individue kan uiteindelik die insekpopulasie domineer indien hierdie insekdoders herhaaldelik en eksklusief gebruik word. Hierdie weerstandbiedende insekte sal waarskynlik nie deur **SAYONARA XTRA** of enige ander groepkode 4A insekdoders beheer word nie.

### Om weerstand teen insekdoders te vertraag:

- Verhoed die eksklusieve herhaaldelike gebruik van insekdoders van dieselfde groepkode. Wissel af met, of gebruik tenkmengsels van, geregistreerde produkte in verskillende insekdodergroepkodes.
- Integreer ander beheermetodes (chemies, verbouing, biologiese) in plaagbestuurprogramme.

Aangesien die voorkoms van weerstandbiedendheid moeilik is om te bepaal, word gebruikers versoek om behandelde gewasse noukeurig dop te hou. Indien behandeling nie effektief is na die gebruik van **SAYONARA XTRA** soos voorgeskryf nie, kan 'n weerstandbiedende populasie teenwoordig wees. Indien 'n weerstandbiedende populasie positief geïdentifiseer is, moet daar onmiddellik oorweging geskenk word aan die gebruik van 'n insekdoder met 'n verskillende metode van werking waarvan daar geen rekord is van weerstand t.o.v die relevante plaag nie. **Vir spesifieke inligting oor weerstandsbestuur moet die registrasiehouer van die produk gekontak word.** Verwys na die IRAC webwerf by <http://www.irac.info/irac/index.html> vir nuutste riglyne.

## GEBRUIKSBEPERKINGS

- Behandel slegs hoë kwaliteit gesertificeerde saad met **SAYONARA XTRA**.
- **SAYONARA XTRA** mag slegs op kommersiële saad gebruik word. Moenie op ingeteelde ouerplante van kruisings (basters) of eksperimentele kultivars gebruik nie. In die geval van nuutvrygestelde kultivars of kruisings, mag dit slegs gebruik word nadat 'n Meridian Agritech verteenwoordiger van jou saadverskaffer geraadpleeg is.
- **MOENIE op Suikermielies gebruik nie.**
- Genoegsame grondvog en gematigde weerstoestande is belangrik vir **SAYONARA XTRA** se doeltreffendheid. Ongunstige ontkiemingstoestande soos langdurige koue-periodes na plant, droogte, oormaat vog, of 'n kombinasie hiervan, mag ontkieming vertraag.
- Tydens toestande van hoë insekpopulasiedruk mag, ten spyte van die saadbehandeling, skade of die vernietiging van saailinge plaasvind.
- **VERWAGTE TYDPERK VAN BEHEER:** 6 weke.

## GEBRUIKSAANWYSINGS

Gebruik slegs soos aangedui.

## MENGINSTRUKSIES

**SAYONARA XTRA** is 'n vloeibare konsentraat wat eers met 'n klein bietjie water gemeng moet word om 'n flodder te vorm. Meng deeglik met die aanbevole hoeveelheid water voordat dit met die saad gemeng word. Die mengsel moet binne 24 uur na voorbereiding gebruik word.

## VERENIGBAARHEID

**SAYONARA XTRA** mag op saad wat voorheen met swamdoder behandel is, gebruik word. Indien **SAYONARA XTRA** in kombinasie met 'n swamdoder-saadbehandelingsmiddel gebruik word, moet die saad eers met die swamdoder, volgens die vervaardiger se voorskrifte, behandel word. Daarna mag dit met **SAYONARA XTRA** behandel word. **SAYONARA XTRA** mag nie in kombinasie met Teprosyn Mo/P gebruik word nie, aangesien die produk die saadbedekking van **SAYONARA XTRA** mag belemmer.

## TOEDIENINGSMETODES

**SAYONARA XTRA** kan deur die meeste saadbehandelings-apparate toegedien word mits die produkmengsel direk op die saad toegedien word. Dit kan deur die spuitkoppe of rotasieskywe gedurende die saadbehandelingsproses toegedien word. Dit is belangrik dat alle toedieningsapparaat wat **SAYONARA XTRA** gebruik, gekalibreer moet wees, aangesien die vloeitempo met dié van ander saadbehandelingsmiddels mag verskil. Dien die mengsel by die saad terwyl gemeng word totdat egale bedekking verkry word. Meng totdat die saad egalig bedek is, droog lyk en geen oortollige mengsel teen die kante of op die bodem van die menger oorbly nie. Moenie vir langer as nodig meng nie. Verkieslik moet saad net voor plant behandel word en nie toegelaat word om te staan nie.

## AANBEVELINGS

GEWAS EN PLAAG	DOSIS	OPMERKING
<b>MIELIES</b>  <b>Vals draadwurms</b> ( <i>Somaticus and Gonocephalum spp.</i> )	0.5 mg aktiewe bestanddeel / pit  Voeg water by teen 'n verhouding van 2 dele water tot een deel <b>SAYONARA XTRA</b>	Saailingskade mag tydens hoë plaagdruk voorkom ten spyte van die saadbehandeling met <b>SAYONARA XTRA</b> .  Saad wat met <b>SAYONARA XTRA</b> behandel is moet verkieslik tussen 3 en 5 cm diep geplant word.  Gebruik die onderstaande tabelle om die korrekte dosisse te bepaal. .

**Saad verpak as aantal pitte per sak:**

Dosis in mL produk/sak	Verpakkingsgrootte in getal pitte per sak
75	90 000
67	80 000
58	70 000
50	60 000

**Saad wat per gewig verpak is en die Duisend Pit Massa (DPM) vir elke verpakking is bekend:** Gebruik asb. die twee formules om die volume **SAYONARA XTRA** te bepaal wat benodig word om 100 kg saad te behandel. (LW: Gebruik slegs indien die DPM bekend is.)

$$(1000 \div \text{DPM}) \times 100\ 000 = \text{n(aantal)} \text{ pitte per 100 kg}$$

$$\frac{(n \times 0.5)}{1000} \div 0.6 = \text{mL produk per 100 kg saad}$$

**Saad wat per gewig verpak is en die Duisend Pit Massa (DPM) vir elke verpakking is onbekend:**

292 mL plus 1 200 mL water vir 100 kg saad

<b>SONNEBLOM</b> <b>Grondkalanders</b> ( <i>Protostrophus spp.</i> )	583 mL plus 920 mL water / 100 kg saad	Aanvanklike blaarskade mag voorkom aangesien grondkalanders op behandelde plante moet vreet om te sterf.
<b>KORING</b> <b>Russiese koringluis</b> ( <i>Diuraphis noxia</i> )	200 mL plus 1300 mL water / 100 kg saad	Ten spyte van 'n <b>SAYONARA XTRA</b> behandeling, mag 'n ligte Russiese koringluis infestasie nog steeds voorkom.  Die behandeling van koringsaad met <b>SAYONARA XTRA</b> sal nie noodwendig volle beheer vir Russiese koringluisgetalle gee nie. Sommige luise mag nog op behandelde plante voorkom, maar hul nadelige effek op plantgroei en gevvolglike verlaging in oesopbrengs sal beperk wees.