

Safety Data Sheet

Sayonara Xtra L11021 (Act 36 of 1947)

1) PRODUCT AND COMPANY IDENTIFICATION	
Product name:	SAYONARA XTRA
Other means of identification:	Thiamethoxam 600 FS
Chemical Name:	Thiamethoxam (IUPAC): (EZ)-3-(2-chloro-1,3-thiazol-5-ylmethyl)-5-methyl-1,3,5-oxadiazinan-4-ylidene(nitro)amine
Recommended use:	Insecticide
Restrictions on use:	Agriculture
UN No:	3082
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 TYGERBERG:021 931 6129 RED CROSS 021 689 5227 RAPID SPILL RESPONSE 0800 775 3305 GRIFFON POISON CENTRE: 082 446 8946
2) HAZARDS IDENTIFICATION:	
Classification of the substance/mixture:	Acute Toxicity Category 4 (Oral) Acute Toxicity Category 4 (Dermal) Skin Irritation Category 3 STOT RE Category 2 (Lungs) STOT RE Category 1 (Gastrointestinal tract) Aquatic Acute Category 1 Aquatic Chronic Category 1
Label Elements: Globally Harmonized System, EU (GHS):	<p>Pictogram:</p>  <p>Signal word: Warning</p> <p>According to Directive 67/548/EEC No. 1272/2008 [CLP]</p> <p>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 (Lungs) H400: Very toxic to aquatic life. H410: Very toxic to aquatic life with long-lasting effects.</p>

	<p>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.</p> <p>Hazard symbols: N: Dangerous for the environment Xi: Irritating substance Xn: Harmful</p> <p>R-phrases(s): R22: Harmful if swallowed. R35 Causes severe burns. R38 Irritating to skin. R37 Irritating to respiratory system. R41 Risk of serious damage to eyes. R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation. R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed. R50/53: Very toxic to aquatic organisms, may cause long-term effects in the aquatic environment.</p> <p>S-phrases(s): S1/2: Keep locked up and out of reach of children. S3: Keep in a cool place. S7: Keep container tightly closed. S13: Keep away from food, drink and animal feeding stuffs. S20/21: When using, do not eat, drink or smoke. S23: Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer). S24: Avoid contact with skin. S24/25 Avoid contact with skin and eyes. S35: This material and its container must be disposed of in a safe way. S36: Wear suitable protective clothing. S57: Use appropriate containment to avoid environmental contamination. S61: Avoid release to the environment. Refer to special instructions/Safety data sheets.</p>
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3) COMPOSITION / INFORMATION ON INGREDIENTS:

3.1 Substances:

Not applicable

3.2 Mixtures:

Chemical name	Concentration	CAS No.	EC No.	Classification according to Regulation EC 1272/2008 (CLP)
Thiamethoxam	600 g/L	153719-23-4	428-650-4	Acute Tox. Cat. 4 (H302) Aquatic Acute Cat. 1 (H400) Aquatic Chronic Cat. 1 (H410)
Denatonium benzoate in monoethylene glycol	4.0%		906-307-4	Acute Tox. Cat 4 (H302)
Glycerol	4.8%	56-81-5	200-289-5	Eye Irrit Cat. 2 (H319) Skin Irrit. Cat. 2 (H315) STOT RE Cat. 2 (H373, Lungs) STOT RE Cat. 1 (H372, gastrointestinal, oral) STOT SE Cat. 3 (H335, Respiratory tract, inhalation)

Acetic Acid	0.2%	64-19-7	200-580-7	Flam. Liq. Cat. 3 (H226) Skin Corr Cat 1A (H314) Eye Dam. Cat 1 (H318)
4) FIRST AID MEASURES:				
Description of First-Aid Measures:				
Inhalation:		Remove patient to fresh air. Loosen clothing around neck. Lie down and keep warm and rested. If breathing is shallow or has stopped, ensure airway is clear and apply resuscitation. If breathing is laboured oxygen should be supplied by qualified personnel only. Seek medical assistance if necessary.		
Skin contact:		Immediately flush body and clothes with large amounts of water. Remove contaminated clothing and footwear. Wash skin gently but thoroughly with plenty of water and non-abrasive soap for 15 to 20 minutes. Do not rub skin. Persons providing first aid must wear gloves to avoid self-contamination. Seek medical assistance if irritation persists.		
Eye contact:		Immediately flush eyes with a stream of gently flowing water for 15 minutes, holding eyelids open. Remove contact lenses, if present, after the first 5 minutes. Seek medical assistance if irritation persists.		
Ingestion:		Drink 1 to 2 glasses of water, induce vomiting and seek medical attention. DO NOT induce vomiting or giving anything by mouth to an unconscious person.		
Most important symptoms and effects, both acute and delayed:		Local symptoms: Slight skin and eye irritation. Systemic symptoms: None documented over many years' experience.		
Indication of any immediate medical attention and special treatment needed:		No specific antidote known. Treat symptomatically and supportively. Check blood pressure and pulse rate frequently as brachycardia and hypotonia are possible. Provide supportive measures for respiratory and cardiac action. Give artificial respiration if signs of paralysis appear. Additional measures to be considered involve the elimination of the substance from the body or acceleration of its excretion (gastrolavage, saline laxatives). If a large amount of this product is ingested the following measures should be considered: Induction of vomiting if the patient is fully conscious and it is less than 30 minutes since ingestion. Monitor blood count, gastric lavage, and charcoal administration. Anticonvulsant therapy is not appropriate.		
5) FIRE-FIGHTING MEASURES:				
Extinguishing Media:		Carbon dioxide, dry chemical powder, water spray or alcohol-resistant foam.		
Unsuitable Extinguishing Media:		High volume water jet due to contamination risk.		
Specific Hazards arising from the substance/mixture:		Fire may produce irritating or poisonous vapours (toxic compounds of carbon, nitrogen and chlorine), mists and other products of combustion.		
Fire Fighting:		Remove spectators from surrounding area. Isolate the fire area and evacuate downwind. Use a recommended extinguishing agent for the type of surrounding fire. Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Contain fire control agents for later disposal. Avoid inhaling hazardous vapours and fumes from burning materials. Keep upwind. Remove container from fire area if possible and without risk. Water can be used to cool unaffected containers but must be contained for later disposal. Do not scatter the burning material. Avoid pollution of waterways by run-off from the site.		
Protective clothing:		Full protective clothing and self-contained breathing apparatus.		
6) ACCIDENTAL RELEASE MEASURES:				

<p>Personal precautions, protective equipment and emergency procedures:</p>	<p>Avoid contact with spilled product or contaminated surfaces. Do not breathe in spray or fumes. Clear the area and shut off the source of the leak only under safe conditions. Extinguish any sources of ignition nearby and downwind. Ensure adequate ventilation. Avoid contact with skin and eyes. For personal protection see Section 8.</p>								
<p>Environmental precautions:</p>	<p>Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. Do not allow to enter drains or watercourses. If contamination of water courses is unavoidable, report to the Police and the Department of Water/Environmental Affairs immediately. Considered as a marine pollutant.</p>								
<p>Methods and material for containment and cleaning up:</p>	<p>Wear protective clothing and avoid breathing mist/vapour. Clear area of unprotected personnel. Ventilate area. Contain and absorb liquid spills with inert material, remove by scoop or vacuum. Use approved industrial vacuum cleaner for removal and place in waste containers. Label containers with the contents and dispose of according to local regulations. Wash area with water and detergent and absorb with further inert material. Heavily contaminated soil layers must be dug out down to clean soil. If spill does enter waterways contact the local authority. Spilled product cannot be re-used and must be disposed of by incineration or disposal in a chemical waste disposal facility. If containers cannot be recycled, they should be disposed of together with the waste chemical. Open burning or dumping of this material is prohibited. Do not get water inside the containers.</p>								
<p>7) HANDLING & STORAGE:</p>									
<p>Precautions for Safe Handling:</p>	<p>Avoid skin and eye contact and inhalation of spray mist, fog or vapours. Ensure adequate ventilation. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke. Wash contaminated clothing before re-use. Keep working clothes separately. Garments that cannot be cleaned must be destroyed by burning. Keep container tightly sealed. Handle and open the container with care and do not open until ready to use. Once the container is opened the contents should be used as soon as possible. Avoid aerosol formation. Provide a means for controlling leaks and spills, do not return residues to the storage containers. Follow all label warnings even after the container is emptied. Avoid all direct contact with the product. Wear suitable personal protection.</p> <p>APPROVED HANDLER: This product must be under the control of an approved handler when applied in a wide dispersive manner; or used by a commercial contractor.</p>								
<p>Conditions for Safe Storage, including any incompatibilities:</p>	<p>Store in original container tightly closed and in a locked, dry, cool area away from foodstuffs, fertilisers and seeds. Keep away from animals, children or uninformed persons. Do not store for prolonged periods in direct sunlight. Protect from frost.</p>								
<p>8) EXPOSURE CONTROL / PERSONAL PROTECTION:</p>									
<p>Appropriate Engineering Controls:</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>Control Parameters: Occupational exposure limits:</p>	<table><tr><td>Ingredient</td><td>CAS#</td><td>Limit</td><td>Basis</td></tr><tr><td>Thiamethoxam</td><td>153719-23-4</td><td>3 mg/m³</td><td>TWA</td></tr></table>	Ingredient	CAS#	Limit	Basis	Thiamethoxam	153719-23-4	3 mg/m ³	TWA
Ingredient	CAS#	Limit	Basis						
Thiamethoxam	153719-23-4	3 mg/m ³	TWA						
<p>PERSONAL PROTECTIVE EQUIPMENT:</p>									
<p>Clothing:</p>	<p>Consult supplier to confirm that the equipment is suitable.</p> <p>Employee must wear appropriate protective (impervious)</p>								

Respiratory protection:	clothing and equipment to prevent repeated or prolonged skin contact with this substance. Wash contaminated clothing and clean protective equipment before re-use.
Gloves:	Wear an approved full-face respirator that is suitable for protection from spray and mists of pesticides.
Eye protection:	Employee must wear appropriate chemical-resistant gloves to prevent prolonged, direct contact with this substance.
Emergency eye wash:	The use of safety goggles with side shields is recommended.
	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.
9) PHYSICAL & CHEMICAL PROPERTIES:	
Appearance:	Cream white liquid
Odour:	Characteristic odour
Solubility:	Suspends in water
pH:	6 - 8.5
Odour threshold:	Not available
Melting point / Freezing point	Not available
Initial boiling point and boiling range	Not available
Flash point:	Not flammable
Evaporation rate:	Not available
Flammability (solid, gas)	Not flammable
Upper/ lower flammability or explosive limits:	Not explosive
Vapour pressure:	Not available
Vapour density:	Not available
Relative density:	1.240
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature:	Not available
Decomposition Temperature:	Not available
Viscosity:	Not available
10) STABILITY & REACTIVITY:	
Reactivity:	No hazardous reactions if stored and handled as indicated.
Chemical Stability:	When stored appropriately this product should show no significant degradation for 2 years from the date of manufacture.
Possibility of hazardous reactions:	No hazardous reactions if stored and handled as indicated.
Conditions to avoid:	Open flames, sparks, sources of ignition and dampness.
Incompatible materials:	Strong acids, oxidizers, dampness (in storage). Alkaline materials.
Hazardous decomposition product(s):	Can decompose at high temperatures and form toxic gasses, such as oxides of carbon and nitrogen.
11) TOXICOLOGICAL INFORMATION:	
Acute Toxicity:	
Oral:	LD ₅₀ >2 000 mg/kg
Dermal:	LD ₅₀ >2 000 mg/kg
Inhalation:	LC ₅₀ >3.5 mg/L (4 hours)
Skin Corrosion/Irritation:	Mild-irritant
Serious Eye Damage/Irritation:	Mild Irritant
Respiratory or Skin Sensitization:	Not a sensitizer
Germ Cell Mutagenicity:	No data available
Carcinogenicity:	No data available
Reproductive Toxicity:	No data available
STOT-SE:	May cause respiratory irritation.
STOT-RE:	Causes damage to organs through prolonged or repeated exposure.
Aspiration Hazard:	No data available
12) ECOLOGICAL INFORMATION:	

Ecotoxicity: Birds: Fish: Daphnia: Algae: Worms: Bees: Other:	<p>Acute oral LD₅₀ for bobwhite quail 1552, mallard ducks 576 mg/kg. Dietary LC₅₀ for bobwhite quail and mallard ducks >5200 mg/kg diet.</p> <p>LC₅₀ (96 h) for rainbow trout >100, bluegill sunfish >114, sheepshead minnows >111 mg/l.</p> <p>EC₅₀ (48 h) >100 mg/l.</p> <p>EC₅₀ (72 h) for <i>Selenastrum capricornutum</i> >81.8 mg/l.</p> <p>LC₅₀ (14 d) for <i>Eisenia fetida</i> >1000 mg/kg soil.</p> <p>0.024 (contact), 0.005 (oral) µg/bee.</p> <p>LC₅₀ (96 h) for mysid shrimps 6.9 mg/l; EC₅₀ (96 h) for eastern oysters >119 mg/l.</p>
Persistence and Degradability:	<p>Soil DT₅₀ 7–109 d (field, 37 soils, median 32.3 d). Photolysis accelerates degradation in soil. Stable in water under acid conditions, hydrolysed under alkaline conditions. DT₅₀ in surface water 7.9–39.5 d (lab., darkness, 7 water-sediment systems, mean 21.5 d). Aqueous photolysis occurs rapidly. No significant volatilisation; efficiently degraded in air by photochemical oxidative degradation.</p>
Bio-accumulative Potential:	<p>No bioaccumulation.</p>
Mobility in Soil:	<p>K_{oc} 32.5–237 ml/g o.c. (25 soils, mean 68.4 ml/g o.c.).</p>
13) DISPOSAL CONSIDERATIONS:	
Waste Disposal:	<p>In accordance with local and national regulations. Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. Do not contaminate water, food or feed by disposal. Wastes resulting from the use of this product cannot be reused and may be disposed of on site or at an approved chemicals waste disposal facility. Open dumping or burning of this pesticide is prohibited.</p>
Container Disposal:	<p>Refer to the product label for instructions. If the container is to be refilled, do not rinse with any material or introduce any pesticide other than this product. Destroy the empty container by perforation and flattening and dispose of it in a safe manner according to local regulations. DO NO REUSE THE CONTAINER FOR ANY OTHER PURPOSE. Do not transport if this container is damaged or leaking.</p>
14) TRANSPORTATION INFORMATION:	
Road Transport ADR / IRD:	<p>UN NUMBER: 3082 UN Proper Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Thiamethoxam) Transport Hazard Class: 9 Miscellaneous Dangerous Goods Packaging group: III Labelling no: 9 Environmental Hazards: Not applicable Special Precautions for User: Read safety instructions, SDS and emergency procedures before handling.</p>
Maritime Transport IMDG / IMO:	<p>UN NUMBER: 3082 UN Proper Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Thiamethoxam) Transport Hazard Class: 9 Miscellaneous Dangerous Goods Packaging group: III Labelling no: 9 Environmental Hazards: Marine Pollutant Special Precautions for User: Read safety instructions, SDS and emergency procedures before handling.</p>
Transport in Bulk (according to Annex II of MARPOL 73/78 and the IBC Code):	<p>Not applicable</p>
15) REGULATORY INFORMATION:	
Safety, health and environmental regulations/legislation specific for the substance/mixture:	<p>For the user of this plant-protective product applies: 'To avoid risks to man and the environment, comply with the instructions for use.' (Directive 1999/45/EC, Article 10, No. 1.2)</p>
Chemical Safety Assessment:	<p>Advice on product handling can be found in sections 7 and 8 of this safety data sheet.</p>
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.

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Abbreviations:

1. CAS number: Chemical Abstracts Service number.
2. CLP: Classification, Labelling, Packaging.
3. LD₅₀: Lethal Dose for 50% of the test population.
4. LC₅₀: Lethal Concentration for 50% of the test population.
5. DT₅₀: Half-life.
6. GHS: Globally Harmonised System (of Classification and Labelling of Chemicals).
7. TWA: Total Weighted Average.

Literature References:

- GHS: www.ccohs.ca/oshanswers/chemicals/ghs.html
- ECHA: <https://echa.europa.eu/search-chemicals>