WG Formulation: Water Dispersible Granule Non-flammable

Servian® 75 WG is a selective postemergence herbicide for the control of yellow nutsedge (*Cyperus esculentus*) and purple nutsedge (*C. rotundus*) in maize and sugarcane.

Composition: m/m
Halosulfuron 750 g/kg
Inert Ingredients up to 1 kg

Chemical group: halosulfuron: sulphonyl urea

Manufacturer:

Syngenta Crop Protection AG Basel, Switzerland

Registered by: Syngenta Agro AG

32 Sandringham Drive, Alexandra Park, Harare.

Tel.: 08677005432/08677005434





Before using this product, read and understand the entire label.

TO CAUSE A HAZARD IN THE USE, STORAGE OR DISPOSAL OF THIS SUBSTANCE IS AN OFFENCE

Emergency Call Number:

Swiss Toxicological Information Centre (24 h) +41 44 251 51 51

Shelf life:

2 years from date of manufacture if kept in the original unopened container under constant cool and dry conditions.

Date of manufacture/Batch No:

See inkjet print on the box.

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Product names marked ® or ™, the ALLIANCE FRAME
the SYNGENTA Logo and the PURPOSE ICON
are Trademarks of a Syngenta Group Company

PRECAUTIONS

- Handle with care; avoid splashing/contact; poisonous by swallowing, inhalation and contact with the skin, eyes, or clothing.
- Wear adequate protective clothing, i.e. for mixing impermeable gloves, long-sleeved overalls, rubber boots, eye/face protection (face shield); for spraying long-sleeved overalls, impermeable gloves, hat, and rubber boots.
- 3. DANGEROUS TO FISH.
- KEEP OUT OF REACH OF CHILDREN, unauthorized persons and domestic animals.
- KEEP APART FROM FOOD, FOODSTUFFS, drinks, seeds, and fertilizers.
- 6. Store in original container in a cool, dry, and well-ventilated place and KEEP UNDER LOCK AND KEY. Avoid tempera-

tures above 35°C.

- 7. Use only on the crops for which the product is registered.
- 8. Avoid drift onto adjacent crops or soil.9. Do not eat, drink, or smoke while handling this product.
- Wash hands and face before doing so.

 10. On completion of mixing/spraying remove protective clothing and wash entire body and change clothing. Dispose of unwanted spray solution by spraying off on waste ground, far from any source of water. Keep unused product in its original container, tightly closed. Do not enter the treated area within 12 hours unless recommended protective clothing is worn.
- 11. Decontamination of Sprayer after use clean the sprayer thoroughly and ensure that all traces of Servian® 75 WG are removed. Make use of the following method: (a) Drain tank then rinse tank, sprayer boom and hoses with clean water for

at least 10 minutes. (b) Fill tank with clean water and add to it 1,5 litres household bleach (3,5%) per 200 litres of water. Rinse hoses and sprayer boom and leave in the tank for 15 minutes whilst agitating. Drain through the nozzle outlets. (c) Repeat step (b) and thereafter, rinse thoroughly with clean water and dispose of the wash water at a site designated for the disposal of pesticides.

- 12. Empty container disposal invert and shake the empty container over the spray tank for at least 30 seconds. Thereafter, rinse the container 3 times with a volume of water equal to at least 10% of that of the container. Add the rinsate to the contents of the spray tank.
- Destroy the empty container by perforation. Place it in a secure disposal area and offer it for recycling. DO NOT use it for any other purpose.

SYMPTOMS OF POISONING

No case of human poisoning is on record.

FIRST AID

General advice: Have the product container, label, or Material Safety Data Sheet with you when calling the Syngenta emergency number, a poison control centre or physician, or going for treatment.

If poisoning is suspected stop work immediately and seek medical advice.

Eye contact: Rinse eyes with clean water for several minutes. Go to a doctor.

Skin contact: Remove contaminated clothing immediately; wash affected skin with soap and water. Go to a doctor if skin is affected.

If inhaled: Move to fresh air.

If swallowed: give medical charcoal with plenty of water.

Note: Never give anything to an unconscious patient.

NOTE TO PHYSICIAN

No specific antidote is known. Apply symptomatic therapy.

PRODUCT INFORMATION

Mode of Action

Servian® 75 WG rapidly inhibits the growth of susceptible weeds. However visible symptoms of dying weeds may not be noticeable for 1 to 3 weeks depending on growing conditions and weed susceptibility.

Spectrum of activity

Cyperus esculentus: yellow nutsedge Cyperus rotundus: purple nutsedge

OTHER FEATURES AND WARNINGS

- Do not apply Servian® 75 WG to maize and sugarcane under stress due to drought, water-logging, disease, or insect damage.
- Do not apply Servian® 75 WG to inbred parent plants of maize hybrids or experimental or newly released maize cultivars without first referring to the manufacturer or seed supplier.
- Do not use Servian® 75 WG on soils where pH is equal or greater than 7 and / or soils containing free lime, as residual activity may be extended, and crop rotation adversely affected beyond normal intervals.

- Servian® 75 WG does not control Cyperus spp. pre-emergence. Poor control of germinating weeds can therefore be expected.
- Servian® 75 WG has no activity on grasses. Grasses must therefore be controlled pre-emergence with Dual® Magnum 960 EC.
- Servian® 75 WG has only limited broadleaf weed activity and must therefore be tank-mixed with other suitable herbicides for a complete spectrum (see note on compatibility).
- Rainfall occurring within 6 hours of Servian® 75 WG application may reduce weed control.

MINIMUM RE-CROPPING INTERVALS

To avoid injury to subsequent crops the following re-cropping intervals are suggested:

Maize, sorghum, and wheat: 1 month

Beans: 3 months
Potatoes: 6 months

Sunflowers and cotton: 13 months

For all other crops a replanting interval of at least 24 months is suggested and must be preceded by a test planting.

The above-mentioned waiting periods are valid only if the correct dosage rate of **Servian® 75 WG** was applied on soils with pH (water scale) of less than 7 and normal or above average rainfall fell during the season in which the application was made.

DIRECTIONS FOR USE

DOSAGE RATES (MAIZE AND SUGARCANE)

Apply **Servian® 75 WG** at 50 grams/ha in 200-400 litres of

water/ha. When using a knapsack sprayer, mix 4 grams per 15-16 litres water and apply 12 to 13 knapsack loads per hectare. Add a suitable surfactant or wetter into the spray mixture, e.g. Complement® Super at 200 ml/ha.

APPLICATION TIMING

For best results apply **Servian® 75 WG** on young (2-6 leaf stage), and actively growing weeds under moist conditions. The degree of control and duration of activity will depend on weed size, growing conditions at, and following the period of application, soil pH, rainfall, and soil organic matter.

Weeds that are overshadowed by other weeds or by the crop may not be controlled due to insufficient coverage.

PREPARING THE MIXTURE

Servian® 75 WG is a water dispersible granular formulation, which mixes easily with water, provided the following procedures are observed:

- Half fill the spray tank with water.
- 2. Start the agitation.3. Add the appropriate amount of wetter or surfactant.
- Add the required quantity of Servian® 75 WG directly to the tank without prior creaming.
- 5. Continue agitation while topping up the tank with water and while spraying.
- 6. Use the prepared spray mixture within 24 hours as the effectiveness may be reduced.

GROUND APPLICATION

Servian® 75 WG can be applied with any medium or high-volume sprayer equipped with an efficient agitation mechanism and which is capable of adequate coverage and even distribution. Best results are obtained using flat-fan spray nozzles and applying in a spray volume of 200-400 litres water/ha.

COMPATIBILITY

Servian® 75 WG is compatible with Dual® Magnum 960 EC. Servian® 75 WG should not be applied in mixtures with other herbicides, fungicides, insecticides, fertilisers or any other chemicals not recommended on this leaflet – consult supplier for more details.

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SERVIAN

Version Revision Date: SDS Number: This version replaces all previous versions.

1.0 10.07.2018 S00030827816

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : SERVIAN

Design code : A9485A

Manufacturer or supplier's details

Company : Syngenta SA (Pty) Ltd

Address P.O. Box 1044,

No. 4 Krokodildrift Avenue Brits 0250

South Africa

Telephone : +27 12 250 6300

Telefax : +27 12 250 3125

E-mail address : sds.ch@syngenta.com

Emergency telephone number : +27 (0) 82 446 8946 (Griffon)

Recommended use of the chemical and restrictions on use

Recommended use : Herbicide

2. HAZARDS IDENTIFICATION

Most important hazards

Warning

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

Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

Chemical name	CAS-No.	Classification	Concentration (% w/w)
halosulfuron-methyl	100784-20-1	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 70 - < 90
sodium dibutylnaphthalenesulphon ate	25417-20-3	Acute Tox. 4; H302 Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Aquatic Chronic 3; H412	>= 1 - < 2,5



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Substances with a workplace exposure limit :
silica 61790-53-2 >= 1 - < 10

For explanation of abbreviations see section 16.

4. FIRST AID MEASURES

General advice : Have the product container, label or Safety Data Sheet with

you when calling the emergency number, a poison control

center or physician, or going for treatment.

If inhaled : Move the victim to fresh air.

If breathing is irregular or stopped, administer artificial

respiration.

Keep patient warm and at rest.

Call a physician or poison control centre immediately.

In case of skin contact : Take off all contaminated clothing immediately.

Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids,

for at least 15 minutes. Remove contact lenses.

Immediate medical attention is required.

If swallowed : If swallowed, seek medical advice immediately and show this

container or label.

Do NOT induce vomiting.

Most important symptoms and effects, both acute and

delayed

Nonspecific

No symptoms known or expected.

Notes to physician : There is no specific antidote available.

Treat symptomatically.

5. FIREFIGHTING MEASURES

Suitable extinguishing media : Extinguishing media - small fires

Use water spray, alcohol-resistant foam, dry chemical or

carbon dioxide.

Extinguishing media - large fires

Alcohol-resistant foam

or

Water spray

Unsuitable extinguishing

media

Do not use a solid water stream as it may scatter and spread

fire.

Specific hazards during

firefighting

As the product contains combustible organic components, fire

will produce dense black smoke containing hazardous



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products of combustion (see section 10).

Exposure to decomposition products may be a hazard to

health.

Specific extinguishing

methods

Do not allow run-off from fire fighting to enter drains or water

courses.

Cool closed containers exposed to fire with water spray.

Special protective equipment :

for firefighters

Wear full protective clothing and self-contained breathing

apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Refer to protective measures listed in sections 7 and 8.

Avoid dust formation.

Environmental precautions : Do not flush into surface water or sanitary sewer system.

If the product contaminates rivers and lakes or drains inform

respective authorities.

Methods and materials for containment and cleaning up

Contain spillage, pick up with an electrically protected vacuum

cleaner or by wet-brushing and transfer to a container for disposal according to local regulations (see section 13).

Do not create a powder cloud by using a brush or compressed

air.

Clean contaminated surface thoroughly. Clean with detergents. Avoid solvents.

Retain and dispose of contaminated wash water.

7. HANDLING AND STORAGE

Advice on safe handling : No special protective measures against fire required.

Avoid contact with skin and eyes. When using do not eat, drink or smoke. For personal protection see section 8.

Conditions for safe storage : No special storage conditions required.

Keep containers tightly closed in a dry, cool and well-

ventilated place.

Keep out of the reach of children.

Keep away from food, drink and animal feedingstuffs.

Further information on

storage stability

Physically and chemically stable for at least 2 years when stored in the original unopened sales container at ambient

temperatures.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type	Control	Basis
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		(Form of exposure)	parameters / Permissible concentration		
silica	61790-53-2	TWA OEL- RL	3 mg/m3	ZA OEL	
		(Respirable			
		dust)			
	Further information: Recommended Limit				
		TWA OEL-	6 mg/m3	ZA OEL	
		RL (inhalable			
		dust)			
	Further information: Recommended Limit				
		TWA OEL-	1,5 mg/m3	ZA OEL	
		RL			
		(Respirable			
		dust)			
	Further information: Recommended Limit				

Engineering measures

Containment and/or segregation is the most reliable technical

protection measure if exposure cannot be eliminated.

The extent of these protection measures depends on the

actual risks in use.

Maintain air concentrations below occupational exposure

standards.

Where necessary, seek additional occupational hygiene

advice.

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally

required.

When workers are facing concentrations above the exposure

limit they must use appropriate certified respirators.

Hand protection

Remarks : No special protective equipment required.

Eye protection : No special protective equipment required.

Skin and body protection : No special protective equipment required.

Select skin and body protection based on the physical job

requirements.

Protective measures : The use of technical measures should always have priority

over the use of personal protective equipment.

When selecting personal protective equipment, seek

appropriate professional advice.



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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : granules

Colour : tan to brownish

Odour : odourless

Odour Threshold : No data available

pH : 4,9

Concentration: 1 % w/v

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : No data available

Evaporation rate : No data available

Flammability (solid, gas) : The product is not flammable.

Self-ignition : > 400 °C

does not ignite

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower

flammability limit

No data available

Vapour pressure : No data available

Relative vapour density : No data available

Solubility(ies)

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity

Viscosity, dynamic : No data available



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Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Minimum ignition energy : < 1.000 mJ

10. STABILITY AND REACTIVITY

Reactivity : None reasonably foreseeable.

Chemical stability : Stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid : No decomposition if used as directed.

Incompatible materials : None known.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of :

exposure

Ingestion Inhalation Skin contact Eye contact

Acute toxicity

Product:

Acute oral toxicity : LD50 (Rat, male and female): > 2.000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 5,7 mg/l

Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rat, male and female): > 2.000 mg/kg

Assessment: The substance or mixture has no acute dermal

toxicity

Components:

sodium dibutylnaphthalenesulphonate:

Acute oral toxicity : Assessment: The component/mixture is moderately toxic after

single ingestion.

Acute inhalation toxicity : Assessment: The component/mixture is moderately toxic after

short term inhalation.



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Skin corrosion/irritation

Product:

Species : Rabbit

Result : No skin irritation

Serious eye damage/eye irritation

Product:

Species : Rabbit

Result : No eye irritation

Components:

sodium dibutylnaphthalenesulphonate:

Result : Eye irritation

Respiratory or skin sensitisation

Product:

Test Type : Buehler Test Species : Guinea pig

Result : Did not cause sensitisation on laboratory animals.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h

Toxicity to algae : ErC50 (Pseudokirchneriella subcapitata (green algae)): 0,032

mg/l

Exposure time: 72 h

NOEC (Pseudokirchneriella subcapitata (green algae)):

0,0010 mg/l

End point: Growth rate Exposure time: 72 h

Components:

halosulfuron-methyl:

Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.



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sodium dibutylnaphthalenesulphonate:

Ecotoxicology Assessment

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

Persistence and degradability

Components:

silica:

Biodegradability : Result: Not readily biodegradable.

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data available

Mobility in soil

Components:

halosulfuron-methyl:

Distribution among

environmental compartments

Remarks: Slightly mobile in soils

Other adverse effects

Components:

silica:

Results of PBT and vPvB

assessment

This substance is not considered to be persistent,

bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating

(vPvB).

13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Do not contaminate ponds, waterways or ditches with

chemical or used container.

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.



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14. TRANSPORT INFORMATION

International Regulations

UNRTDG

UN number : UN 3077

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(HALOSULFURON-METHYL)

Class : 9
Packing group : III
Labels : 9

IATA-DGR

UN/ID No. : UN 3077

Proper shipping name : Environmentally hazardous substance, solid, n.o.s.

(HALOSULFURON-METHYL)

Class : 9 Packing group : III

Labels : Miscellaneous

Packing instruction (cargo

aircraft)

Packing instruction : 956

(passenger aircraft)

Environmentally hazardous : yes

IMDG-Code

UN number : UN 3077

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

956

(HALOSULFURON-METHYL)

Class : 9
Packing group : III
Labels : 9
EmS Code : F-A, S-F
Marine pollutant : yes

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

15. REGULATORY INFORMATION

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

None known.



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16. OTHER INFORMATION

Full text of other abbreviations

ZA OEL : South Africa. Hazardous Chemical Substances Regulations,

Occupational Exposure Limits

ZA OEL / TWA OEL-RL : Long term occupational exposure limits - recommended limit

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR -Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN -Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan): ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory 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; Nch -Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - 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 substance: 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; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; 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; WHMIS - Workplace Hazardous Materials Information System

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.

ZA / EN